

BLAINE AIR PERMEABILITY APPARATUS

Standard: UNE 80-122, EN 196-6, ASTM C204, BS 4359

Fineness Of Cement

The apparatus use to determine the specific surface of cement.

Technical Specifications :

Model Number	NL 3000 X / 001
Dimension (mm)	180 (L) x 140 (W) x 390 (H)
Approx. Weight	12 kg

Set Consist Of:

Model Number	Parts Description	Qty
NL 3000 X / 001 – P 001	Manometer U-Tube in Glass	1no.
NL 3000 X / 001 – P 002	Cell with Perforated Disc & Plunger	1no.
NL 3000 X / 001 – P 003	Rubber Aspirator with Rubber Tube	1no.
NL 3000 X / 001 – P 004	Manometer Liquid 250 ml Bottle	1btl.
NL 3000 X / 001 – P 005	Filter Papers 100 pcs / pack	1pck.
NL 3000 X / 001 – P 006	Panel Board with Stand	1no.
NL 3000 X / 001 – P 007	Standard Reference Cement 114 g to ASTM/SRM/EN to Calibrate the Blaine	1btl.
NL 3000 X / 001 – P 008	Vaseline Grease	1btl.
NL 7034 X / 005	Glass Thermometer 0°C to 50°C	1no.

*1 Copy of Manual Instruction





SAND CONTENT KIT

Standard: ASTM D 4381

Sand Content of Drilling Muds

For determining the sand content of drilling muds.

Technical Specifications :

Model Number	NL 3001 X / 001
Dimension Case (mm)	530 (L) x 140 (W) x 100 (H)
Approx. Weight	4 kg

Set Consist Of:

Model Number	Parts Description	Qty
NL 3001 X / 001 – P 001	10 ml Glass Measuring Tube	1no.
NL 3001 X / 001 – P 002	200 Mesh Sieve 2.5 in Dia. with Funnel	1set
NL 7047 P / 001	Plastic Wash Bottle 250 ml	1no.
NL 3001 X / 001 – P 003	Carry Case	1no.

*1 Copy of Manual Instruction



DROPPING BALL APPARATUS

Standard: BS 4551-1, 6463-4

Sand Equivalent Value Test

Use to measure the consistency of cement mortars, this instrument allows a 25 mm diameter acrylic ball fall freely from a standard height.



Technical Specifications :

Model Number	NL 3002 X / 001
Height of Drop	250 mm
Approx. Weight	8 kg

Set Consists Of :

Model Number	Parts Description	Qty
NL 3002 X / 001 – P 001	Dropping Ball Device Stand	1set
NL 3002 X / 001 – P 002	Acrylic Ball	1no.
NL 3002 X / 001 – P 003	Mortar Ring Mould Ø 100 x 25 mm	1no.
NL 3002 X / 001 – P 004	Penetration Measuring Device	1no.
NL 3002 X / 001 – P 005	Rubber Suction Hand Pump	1no.
NL 7020 X / 001	Dial Indicator 25 x 0.01 mm	1no.

*1 Copy of Manual Instruction



GILLMORE APPARATUS

Standard: ASTM C91, C141, C266 / AASHTO T154

Determine of the Setting Time Cement

Used to determine the setting time of cement. The apparatus consist of two horizontal arms, which carry two weighted steel needles, which are precision machined to meet the specified requirements.

Technical Specifications :

Model Number	NL 3003 X / 001
Initial Setting Needle Diameter	2.12 mm
Final Setting Needle Diameter	1.06 mm
Initial Setting Weight Piece	113 Gram
Final Setting Weight Piece	453.6 Gram
Dimension (mm)	200 (L) x 100 (W) x 200 (H)
Approx. Weight	2.1 kg

*1 Copy Of Manual Instructions

FLOW CONE APPARATUS(EN)

Standard: EN 445

Flow Properties Of Grouts, Muds & Other Fluid Materials

Used for determining the flow properties of mortars, grouts, muds and many other type of fluid materials.

Technical Specifications :

Model Number	NL 3004 X / 001
Dimension (mm)	250 (L) x 200 (W) x 580 (H)
Approx. Weight	10 kg

Set Consist Of:

Model Number	Parts Description	Qty
NL 3004 X / 001 – P 001	Flow Cone Set	1no.
NL 3004 X / 001 – P 002	Brass Nozzle Ø 10 mm	1no.
NL 3004 X / 001 – P 003	Retort Stand with Cone Holder	1set
NL 7048 SS / 002	Stainless Steel Measuring Jug 2000 ml	1no.

*1 Copy Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3004 X / 001 – A 001	Brass Nozzle Ø 12.5 mm
NL 3004 X / 001 – A 002	Stainless Steel Sieve 150 x 1.5 mm Mesh
NL 3004 X / 001 – A 003	Brass Nozzle Ø 8 mm
NL 3004 X / 001 – A 004	Brass Nozzle Ø 9 mm
NL 3004 X / 001 – A 005	Brass Nozzle Ø 11 mm



NL 3004 X / 001 – A 002 Ø8,Ø9,Ø11 & Ø12.5 mm





FLOW CONE APPARATUS (ASTM)

Standard: ASTM 939

Flow Properties Of Grouts, Muds & Other Fluid Materials

Used for determining the flow properties of mortars, grouts, muds and many other type of fluid materials.

Technical Specifications :

Model Number	NL 3004 X / 003
Dimension (mm)	460 (L) x 410 (W) x 780 (H)
Approx. Weight	5.1 kg

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3004 X / 003 – P 001	Cast Flow Cone with 2 Pointer	1set
NL 3004 X / 003 – P 002	Cone Tripod Stand	1no.
NL 7048 SS / 002	Stainless Steel Measuring Jug 2000 ml	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3004 X / 003 – A 001	Leveling Ruler 150 mm Length
NL 7031 X / 001	Digital Stop Watch

THREE-LAYER CURING TANK

Standards : EN 196-1, EN 196-8, ASTM C109, ASTM C511, EN ISO 679

Determination of Setting Time & Consistency of Cement

The curing tank is made of stainless steel for curing of cement specimens at the required water temperature regulated by a refrigerated bath circulator. Mortar prisms can be positioned vertically and neatly for more sample quantity. Cooled water at controlled temperature is supplied to the top most layer of the tank and water is allowed to free-fall into the second and third layer to ensure consistent temperature throughout the entire curing tanks.



Curing Tank Technical Specifications

Model Number	NL 3005 X / 001
Dimension (mm)	600 (L) x 800 (W) x 1505mm (H)
Tank Dimensions (2nd & 3rd layer)	748 x 548 x 260 mm (WxLxD)
Reservoir Tank Dimension (Top Layer)	748 x 548 x 220 mm (WxLxD)
Standard sample positioning rack	40 x 40 x 160 mm mortar prism

Refrigerated Bath Circulator Specifications

Model Number	NL 7058 X / 003
Temperature	20°C ~ 60°C
Accuracy	± 0.05°C
Safety	Circuit breaker for heater & cooling, overload protection for compressor
Bath Capacity	30 liter
Output Flow	30 liter/min
Approximate Weight	60 kg
Power	220V, 1.5 kW, 50/60 Hz, 1 phase



JOLTING APPARATUS

Standard: EN 196-1, BS 3892, UNE 80101

Preparation of 40 x 40 x 160mm prisms

The apparatus used to compact cement mortar prism in the three gang mould. Made in galvanized chrome steel with quick locking device for sample. Structure in two parts, fixed and oscillating. Easily removable to check weight. Drop height 15 mm with a drop 60 drops per minute cycle. Control panel with main switch, main neon. Start / Stop button with digital selector, to select number of cycles which the machine automatically stop. Supply with emergency stop switched and built in feed hopper and quick clamp.

Technical Specifications :

Model Number	NL 3006 X / 002
Dimension (mm)	1150 (L) x 225 (W) x 360 (H)
Approx. Weight	39 kg
Power	220 - 240 V, 50 / 60 Hz, 1 ph

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3006 X / 001 – P 001	Control Box	1no.
NL 3006 X / 001 – P 002	Scraper (set of 2)	1set

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3006 X / 001 – A 001	Prism Gang Mould Size: 40x40x160mm (8kg)

THREE GANG PRISM MOULD

Standard: ASTM C490

Expansion of Portland Cement

With three gang compartments design, fully polishing surface to achieved perfect curing finishing and high accuracy specimen. Come with pack of brass insert (Pack of 12 pcs)



NL 3007 X / 001 - P001



Technical Specifications :

Model Number	NL 3007 X / 001
Number of Compartments	3
Specimen Dimension	25 x 25x 285 mm
Mould Dimension	395(L) x 120(W) x 45(H)
Mould Appx. Weight	6 kg

Supplied With :

Model Number	Parts Description	Qty
NL 3007 X / 001 - P 001	Brass Insert	6nos.

*1 Copy Of Manual Instructions

Optional Accessories :

Model Number	Accessories Description
NL 3024 X / 002	Length Comparator Apparatus
NL 3007 X / 001 - A001	Brass Insert (Pack of 12 pcs)



NL 3007 X / 003 - P001

TWO GANG PRISM MOULD

Standard: ASTM C531

Expansion of Portland Cement

With two gang compartments design, fully polishing surface to achieved perfect curing finishing and high accuracy specimen. Come with pack of brass insert.

Technical Specifications :

Model Number	NL 3007 X / 003
Dimension (mm)	333 (L) x 94 (W) x 35 (H)
Specimen Dimension	25 x 25 x 250 mm
Approx. Weight	6 kg

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3007 X / 003 - P001	Stainless Steel/Brass Insert (12 pcs/pack)	1pck.



MORTAR WORKABILITY APPARATUS

Standard: EN 413-2/459-2, NF P18-452

Workability Of Masonry Cement & Building Limes Test

Used to verify the homogeneity of concrete in relation to its workability or plasticity. This test method has particular applications for concretes containing chemical admixtures. The apparatus consists of a metal box divided into two parts and fitted with an electrical vibrator system.

Technical Specifications :

Model Number	NL 3008 X / 001
Dimension (mm)	230 (L) x 155 (W) x 240 (H)
Controller Dimension (mm)	150 (L) x 125 (W) x 340 (H)
Approx. Weight	18.5 kg
Power	220 V, 50 / 60 Hz, 1 Phase



MARSH FUNNEL VISCOMETER

Standard: ISO 2431

Flow Properties of Grouts

Used to determine the quality of drilling mud. Funnel viscosity is the ratio of the speed of the sample as it passes through the outlet tube (shear rate) to the amount of force (fluid weight) that is causing the fluid to flow (shear stress). Full set are made from stainless steel.

Technical Specifications :

Model Number	NL 3010 SS / 001
Material	Stainless Steel
Approx. Weight	1.3 kg

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3010 SS / 001 – P 001	Marsh Funnel	1no.
NL 3010 SS / 001 – P 002	Measuring Cup 2 L	1no.
NL 3010 SS / 001 – P 003	Pouring Mud	1no.

*1 Copy Manual Instruction

Optional Accessories:

Model Number	Parts Description
NL 7031 X / 001	Digital Stop Watchz

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MARSH FUNNEL VISCOMETER

Standard: ISO 2431

Flow Properties of Grouts

Used to determine the quality of drilling mud. Funnel viscosity is the ratio of the speed of the sample as it passes through the outlet tube (shear rate) to the amount of force (fluid weight) that is causing the fluid to flow (shear stress). Full set are made from stainless steel.

Technical Specifications :

Model Number	NL 3010 X / 001
Material	Plastic
Approx. Weight	1 kg

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3010 X / 001 – P 001	Marsh Funnel	1no.
NL 3010 X / 001 – P 002	Measuring Cup 2 L	1no.
NL 3010 X / 001 – P 003	Pouring Mud	1no.

*1 Copy Manual Instruction

Optional Accessories:

Model Number	Parts Description
NL 7031 X / 001	Digital Stop Watch



PLUNGER PENETRATION APPARATUS

Standard: EN 413-2, EN 459-2, EN 1015-4

Consistency of Masonry

The apparatus used for determine the consistency of fresh mortar, lime and masonry cement. Consisting of a steel base with recess to house the test cup and the vertical column holding the penetration plunger assembly with drop height of 100 mm.

Technical Specifications :

Model Number	NL 3011 X / 001
Dimension (mm)	200 (L) x 200 (W) x 700 (H)
Approx. Weight	9 kg

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3011 X / 001 – P 001	Test Cup (80 mm Ø x 70 mm depth)	1no.
NL 3011 X / 001 – P 002	Tamper	1no.
NL 3011 X / 001 – P 003	Metal Sheathed	1no.
NL 3011 X / 001 – P 004	Rigid Stand	1no.
NL 3011 X / 001 – P 005	Penetration Plunger (90 g)	1no.

*1 Copy of Manual Instruction

MANUAL VICAT APPARATUS (BS/EN)

Standard: BS EN 196-3/480-2

Determination of Setting Time & Consistency of Cement

The Vicat frame consists essentially of a metal stand with a sliding rod. An adjustable indicator moves over a graduated scale. The needle or plunger is attached to the bottom end of the rod to make up the test weight of 300 g. The frame is supplied with basic BS EN accessories.

Technical Specifications :

Model Number	NL 3012 X / 003
Standard	BS/EN
Dimension (mm)	215(W)x160(L)x323(H)
Approx. Weight	4.0 kg

Set Consists Of :

Model Number	Parts Description	Qty
NL 3012 X / 003 – P 001	Conical Plastic Mould - Ø70/80x40 (H) mm	1no.
NL 3012 X / 003 – P 002	Initial Needle Ø 1.13 mm ± 0.05	1no.
NL 3012 X / 003 – P 003	Final Needle Ø 1.13 mm ± 0.05	1no.
NL 3012 X / 003 – P 004	Consistency Plunger Ø10mm	1no.
NL 3012 X / 003 – P 005	Glass Plate 4 x 98 x 98 mm	2nos.

*1 Copy of Instruction Manual

Optional Accessories :

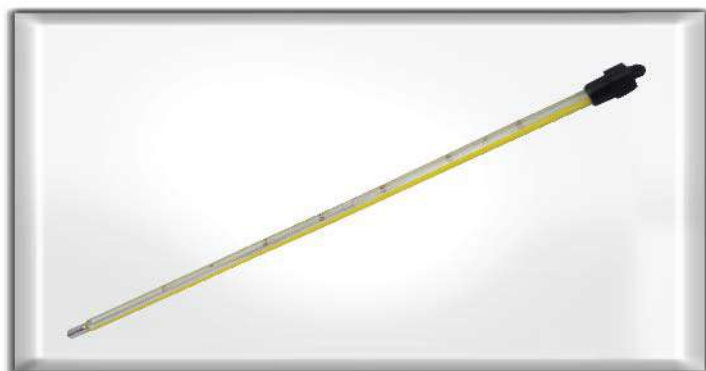
Model Number	Parts Description
NL 3012 X / 003 – A 001	Additional Weight 700g (BS/EN)
NL 3012 X / 003 – A 002	Conical Brass Mould (BS)
NL 7034 X / 005	Glass Thermometer 0 - 50°C x 1°C div.



700 g Weight



Conical Brass Mould



Glass Thermometer

MANUAL VICAT APPARATUS (ASTM/AASHTO)

Standard: ASTM C187-04, ASTM C191-04, AASHTO T 129-06, AASHTO T131-06

Determination of Setting Time & Consistency of Cement

The vicat frame consists essentially of a metal stand with a sliding rod. An adjustable indicator moves over a graduated scale. The needle or plunger is attached to the bottom end of the rod to make up the test weight of 300 g. The frame is supplied with basic ASTM & AASHTO accessories.

Technical Specifications :

Model Number	NL 3012 X / 004
Standard	ASTM/AASHTO
Dimension (mm)	215(W)x160(L)x323(H)
Approx. Weight	4.0 kg

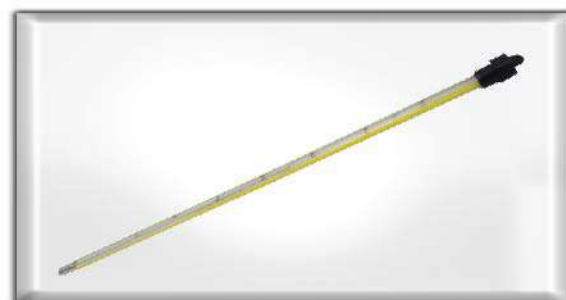
Set Consists Of :

Model Number	Parts Description	Qty
NL 3012 X / 004 – P 001	Conical Plastic Mould - Ø60/70x40 (H) mm	1no.
NL 3012 X / 004 – P 002	Initial Needle Ø 1.0 mm ± 0.05	1no.
NL 3012 X / 004 – P 003	Final Needle Ø 1.0 mm ± 0.05	1no.
NL 3012 X / 003 – P 004	Consistency Plunger Ø10mm	1no.
NL 3012 X / 003 – P 005	Glass Plate 4 x 98 x 98 mm	2nos.

*1 Copy of Instruction Manual

Optional Accessories :

Model Number	Parts Description
NL 7034 X / 005	Glass Thermometer 0 - 50°C x 1°C div



Glass Thermometer



WATER FLOW SIEVES APPARATUS

Standard: D.M. 3 / 6 / 68

Determination of Fly Ash

Used to determine the fineness of cement.

Technical Specifications :

Model Number	NL 3013 X / 001
Approx Weight	3 kg

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3013 X / 001 – P 001	Measuring Gauge with Feed Cock	1no.
NL 3013 X / 001 – P 002	Brass Sieving Set	1set
NL 3013 X / 001 – P 003	Stainless Steel Cloth 180 µm	1no.
NL 3013 X / 001 – P 004	Stainless Steel Cloth 90 µm	1no.

*1 Copy Manual Instruction



NL 3014 X / 001 – A 001

BALL MILL APPARATUS

Materials Grinding

A cylindrical device used in grinding (or mixing) materials like ores, chemicals, ceramic raw material & etc. The drum rotate around a horizontal axis.

Technical Specifications :

Model Number	NL 3014 X / 001
Drum Capacity	150 Litres
Drum Rotation Speed	31 - 33 r.p.m.
Dimension (mm)	1500 (L) x 860 (W) x 1275 (H)
Approx. Weight	520 kg
Power	2.2 KW, 415 V, 3 Hp, 3 ph, 46 A

Set Consist Of:

Model Number	Parts Description	Qty
NL 3014 X / 001 – P 001	Abrasive Charges (12 pcs / set)	1set

*1 Copy of Manual Instruction

Optional Accessories:

Model Number	Accessories Description
NL 3014 X / 001 – A 001	Sound Prove Cabinet [1840 (L) x 1060 (W) x 1540 (H)]

FLOW TABLE APPARATUS (ASTM)

Standard: ASTM C230

Consistency, Flow, Workable Life & Water Vapour

Permeability of Mortars

Used to determining the consistency of mortar & building line. Offering ASTM & EN standard, manual & motorized. A specimen contained in a cone mould is placed on a metal surface which is then raised & dropped from a known height after releasing the specimen from the mould.



NL 3016 X / 001



NL 3016 X / 001 - A 001



NL 3016 X / 001 - A002

Technical Specifications :

Model Number	NL 3016 X / 002	NL 3016 X / 001
Type	Hand Operated	Motorized Operated
Dimension (mm)	310 (L) x 255 (W) x 245 (H)	
Diameter of Table	254 mm Brass	
Height of Drop	12.7 mm	
Flow Table Weight	4.08 kg	
Approx. Weight	14.6 kg	
Power	–	220 V, 1 ph, 50 / 60 Hz

Set Consists Of :

Model Number	NL 3016 X / 002	NL 3016 X / 001
NL 3016 X / 001 – P 001	Brass Flow Mould - Top Ø69.9, Base Ø101.6, 50.8 mm (H)	
NL ADC 100	–	Armortron Controller
NL 3016 X / 001 – P 004	Hardwood Tamper (12 x 25 x 150 mm)	

*1 Copy Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3016 X / 001 – A 001	Flow Caliper (ASTM)
NL 3016 X / 001 – A 002	Acrylic Retainer Disc



NL 3016 X / 002

FLOW TABLE APPARATUS (EN)

Standard: EN 459-2, EN 1015-3

Consistency, Flow, Workable Life & Water Vapour

Permeability of Mortars

Used to determining the consistency of mortar & building line. Offering ASTM & EN standard, manual & motorized. A specimen contained in a cone mould is placed on a metal surface which is then raised & dropped from a known height after releasing the specimen from the mould.

Technical Specifications :

Model Number	NL 3016 X / 004	NL 3016 X / 003
Type	Hand Operated	Motorized Operated
Dimension (mm)	380 (L) x 300 (W) x 245 (H)	
Diameter of Table	300 mm Cast Iron	
Height of Drop	10 mm	
Flow Table Weight	4.2 to 4.5 kg	
Approx. Weight	15 kg	
Power	–	220 V, 1 ph, 50 / 60 Hz

Set Consists Of :

Model Number	NL 3016 X / 004	NL 3016 X / 003
NL 3016 X / 003 – P 001	Brass Flow Mould - Top Ø70, Base Ø100, 60 mm (H)	
NL 3016 X / 001 – P 002	Filling Hopper	
NL ADC 100	–	Armortron Controller
NL 3016 X / 003 – P 003	Tampers	

*1 Copy Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 7025 X / 003	Flow Caliper (EN)



NL 3016 X / 003



NL 7025 X / 003



NL 3016 X / 004

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LE CHATELIER FLASK

Standard: EN 196-6 / ASTM C188,
AASHTO T 133 / UNE 83453

Specific Gravity (Relative Density)

Used to determine the specific gravity of hydraulic cement & lime.

Technical Specifications :

Model Number	NL 3017 X / 001
Approx. Weight	0.5 kg

Optional Accessories:

Model Number	Accessories Description
NL 3017 X / 001 – A 001	Chattaway Spatula 120 mm Lg.

DIGITAL PULL OFF TESTER 6 kN (BOND STRENGTH)

Standard: EN 1542, EN 1348,
EN 1015-12

Strength Evaluation

Used to determine the bonding strength of concrete overlay adhesion. Also suitable for measuring the strength of applied coatings such as plastic, mortars, plasters, tiles, bituminous coats as well as paint & other coatings on metal. It tests at any measuring point on the component, without requiring specimen preparation. However, a suitable depth of coring diameter same as the test disc is prepared prior to pulling off the surface bonding. Supplied complete with carry case. Accessories to be ORDER SEPARATELY.



Technical Specifications :

Model Number	NL 3020 X / 001
Max. Load Capacity	6 X 0.001 kN sensitivity
Accuracy & Repeatability	≤1.0% F.S
Piston Travel	10 mm
LED Display	55 mm LED Screen
Bracket Span Distance	120 mm
Data Memory	500 Test Result
Power Source	200 V, 1pH (Rechargeable)
Tester Weight	2 kg
Tester Dimension (LxWxH)	150 X 150 X 150 mm
Carry Case Dimension (LxWxH)	400 X 330 X 220 mm

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3020 X / 001 - P 001	Puller Rod c/w Knob	1no.
NL 3020 X / 001 - P 002	Cranked Handle	1no.
NL 3020 X / 001 - P 003	Power Charger	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 4016 X / 003 - A 001	Adhesion Test Aluminium Disc 20 mm dia. by 20 mm thick (n. 10 pieces)
NL 4016 X / 003 - A 002	Adhesion Test Aluminium Disc 50 mm dia. by 20 mm thick (n. 10 pieces)
NL 4016 X / 003 - A 003	Adhesion Test Stainless Steel Disc 50 mm dia. by 20 mm thick (n. 10 pieces) It confirms to EN 1015-12 Specification.
NL 4016 X / 003 - A 004	Adhesion Test Aluminium Disc, square, 50 x 50 mm, 20 mm thick (n. 10 pieces) Standard: EN 1348
NL 4016 X / 003 - A 005	Cylindrical ring, having truncated cone shape, inside dia. 50 mm Standard: EN 1015-12
NL 4016 X / 003 - A 006	High Performance Epoxy Adhesive 30 ml
NL 7018 X / 002	Core Bit Set 50 mm I.D
NL 7018 X / 007	Core Bit Set 20 mm I.D (With Adaptor)
NL 4006 X / 001	Hand Held Coring Machine with Portable Base. 220 V, 50 / 60 Hz, 1900 W (Max: Ø100 mm)

AUTOCLAVE

Standard: ASTM C151/C490,
AASHTO T 107

Expansion Of Portland Cement

The autoclave is high-pressure steam vessel, made from special alloy steel. Supplied complete with pressure gauge, pressure regulator and system control compartment unit.

Technical Specifications :

Model Number	NL 3021 X / 001
Internal Dimension (mm)	158 Dia. X 460 Deph.
Maximum Pressure	2.2 Mpa
Number of Specimen	9 nos.
Approx. Dimension	550 Dia. X 1120 (H) (Cell)
	450 W x 300 L x 800 H (control)
Approx. Weight	120 kg
Power	220V, 1Ph, 50/60H, 1.2kW

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3021 X 001 - P001	Specimen Rack	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3007 X / 001	Three Gang Prism Mould
NL 3007 X / 002	Two Gang Prism Mould





LE CHATELIER MOULD SET

Standard: BS 6463, EN 196-3, pr EN ISO 9597

Soundness of Cement & Hydrated Lime

Used to determine the setting & expansion of cement & hydrated lime specimens.

Technical Specifications :

Model Number	NL 3022 X / 001
Approx. Weight	800 gram

Set Consist Of:

Model Number	Parts Description	Qty
NL 3022 X / 001 – P 001	Glass Plate, 50 mm sq. (set of 2)	1set
NL 3022 X / 001 – P 002	100 g Weight Set	1no.
NL 3022 X / 001 – P 003	Le Chatelier Mould	1no.

*1 Copy of Manual Instruction

Optional Accessories:

Model Number	Accessories Description
NL 3022 X / 001 – A 001	Le Chatelier Extensibility Frame
NL 3023 X / 001	Le Chatelier Water Bath



LE CHATELIER SOUNDNESS KIT

Standard: EN 196-3, EN-459-2, ISO 9597,
BS 6463, NF P15-432, UNE 80102

Determining Cement Expansion

Used for determining the expansion of cement, Le Chatelier moulds consists of a spring tensioned split cylinder 30 mm inside and 30 mm high, with two indicator stems attached either side of the split which measure 165 mm from their tips to the centre of the cylinder and an O-Ring. Two or three moulds are required for each test.

Technical Specifications :

Model Number	NL 3022 X / 002
Dimension (mm)	330 (L) x 245 (W) x 80 (H)
Approx. Weight	1 kg

Set Consist Of:

Model Number	Parts Description	Qty
NL 3022 X / 001 – P 003	Le Chatelier Moulds	3no.
NL 3022 X / 001 – P 001	50 x 50 mm Glass Plates	6pcs
NL 3022 X / 001 – P 002	100 g Weights Set	3no.
NL 3022 X / 001 – P 004	Extensibility of Mould Apparatus	1no.
NL 3022 X / 001 – P 005	Tamping rod, 17 mm Dia. x 70 g Weight	1no.
NL 7055 X / 001	Steel Rule	1no.

*1 Copy Manual Instruction



NL 3022 X / 001 – P 003



NL 3022 X / 001 – A 001

LE CHATELIER WATER BATH

Standard: BS 6463, EN 196-3, pr EN ISO 9597

Soundness of Cement & Hydrated Lime

Constructed with stainless steel inside chamber & exterior case in painted steel sheet.

Technical Specifications :

Model Number	NL 3023 X / 001
Dimension (mm)	510 (L) x 310 (W) x 280 (H)
Temperature Range	Ambient to 99°C
Approx. Weight	10.2 kg
Power	220 V, 1 ph, 50 / 60 Hz, 500 W

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3023 X / 001 – P 001	Stainless Steel Mould Rack	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3022 X / 001 – A 001	Le Chatelier Extensibility Frame
NL 3022 X / 001 – P 003	Le Chatelier Mould



LENGTH COMPARATOR APPARATUS

Standard: EN 12617-4, EN 1367-4,
EN 12808-4, ASTM C151, ASTM C490

Expansion of Portland Cement

Used to measure the length variation of cement specimens, the unit comprises a steel frame with an adjustable height beam, analogue dial indicator range 5 x 0.002 mm. Supplied "WITHOUT" reference rod and accessories which have to be ordered separately.

Technical Specifications :

Model Number	NL 3024 X / 002A
Dimension	145 mm dia. x 435 mm Height
Approx. Weight	2 kg

Set Consists Of :

Model Number	Parts Description	Qty
NL 3024 X / 002 – P 001	Rigid Steel Frame	1no.
NL 7020 X / 003	Dial Indication 5 x 0.001 mm	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3024 X / 001 – A 001	Reference Rod 300 mm (ASTM)
NL 3024 X / 001 – A 002	Reference Rod 170 mm (ASTM)
NL 3024 X / 001 – A 003	Reference Rod 205 mm (BS)
NL 3024 X / 001 – A 004	Reference Rod 230 mm (BS)
NL 3024 X / 001 – A 005	Reference Rod 298.5 mm (BS)
NL 3024 X / 001 – A 006	Reference Rod 305 mm (BS)
NL 3024 X / 001 – A 007	Reference Rod 160 mm (UNI)
NL 3024 X / 001 – A 008	Reference Rod 190 mm (EN)
NL 3024 X / 001 – A 009	Reference Rod 250 mm
NL 3024 X / 001 – A 010	Reference Rod 315 mm (BS)
NL 7020 X / 013	Digital Indicator (with hold function) 6.5x0.001mm
NL 7020 X / 013 - P001	Digital Indicator Data Transfer Cable & Software Set



TAPERED CYLINDER MOULD

Standard: ASTM C 1090

Cement Mould

Used to determine volume change of grout, mould is constructed of steel tubing of 89 dia. X 160 (H) mm. Mould is split longitudinally with two quick-acting clamps welded to the mould. Top edge of mould is machine tapered to a narrow rim. Includes detachable base plate.

Technical Specifications :

Model Number	NL 3025 X / 001
Mould Dimension (mm)	ID 76 dia. X 152 (H) Mild Steel Cylinder Mould
Overall Dimension (mm)	130 (L) x 130 (W) x 162 (H)
Approx. Weight	3.8 kg



MORTAR THREE GANG MOULD

Standard: ASTM C109, AASHTO T106

Sample Preparation

Cast iron, ABS Plastic or hardened steel three gang mould complete with surface grinding and base plate.

Technical Specifications :

Model Number	Material	Dimension (mm)	Approx. Weight
NL 3026 C / 001	Cast Iron	50 (L) x 50 (W) x 50 (H)	6.3 kg
NL 3026 M / 002	Mild Steel	50 (L) x 50 (W) x 50 (H)	4 kg
NL 3026 M / 004	Mild Steel	75 (L) x 75 (W) x 75 (H)	6.7 kg
NL 3026 M / 006	Mild Steel	70.7 (L) x 70.7 (W) x 70.7 (H)	6.2 kg
NL 3026 P / 007	ABS Plastic	70.7 (L) x 70.7 (W) x 70.7 (H)	0.7 kg
NL 3026 P / 008	ABS Plastic	50 (L) x 50 (W) x 50 (H)	0.5 kg

AUTOMATIC MORTAR COMPRESSION / FLEXURAL AND CONCRETE FLEXURAL MACHINE 300 kN

Standard: EN 196-1, ASTM C 109, EN 12390-5, ASTM C78, C293

Compression & Flexural Test

This machine is designed for flexural & compression test of cement mortar equipped with two loading frames with two independent measuring ranges for better and consistent performance. It's fully computer controlled provides constant loading rate for both compression and flexural test. The advanced & user friendly computer software enables result to be acquired automatically with the test best curve display & result database being saved virtually unlimited inside the computer. Suitable for testing on flexural and compression of 40x40x150 mm mortar prism and compression of 50 mm mortar cubes. Supplied complete with computer set & printer.

**NEW
2018**



Technical Specifications :

Model Number	NL 3027 X / 002	
Type of Test	Compression	Flexural
Speed Control Range	0.1 - 10 kN/S	0.1 - 10 kN/S
Resolution	0.01 kN	0.01 kN
Platen Diameter	Ø160 mm Top & Bottom	Ø160 mm Top & Bottom
Measuring Change	0.2 - 100% F.S	
Accuracy	1% (Class 1)	
Loading Rate Error	±1%	
Approx. Weight	293 kg	
Dimension /	850x510x1335	
Main Frame (mm)	(LWH)	
Power	220 V, 50/60 Hz, 1ph, 1 Hp, 750 W, 5 Amp	

Set Consists Of :

Model Number	Parts Description	Qty
NL STS - 7.1	Super Test Software 7.2	1 no.
NL 3027 X / 002	Auto Mortar Comp/Flexural Machine	1 no.
NL 3027 X / 002 - P004	Concrete Flexural Device	1 no.
NL 3027 X / 002 - P005	Compression Jig Set	1 no.
NL 3027 X / 002 - P006	Distance Piece 30 mm	1 no.
NL 3027 X / 002 - P007	Distance Piece 35 mm	1 no.
NL 3027 X / 002 - P008	Distance Piece 50 mm	1 no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3027 X / 002 - P 001	Mortar Prism Flexural Device
NL 3027 X / 002 - P 002	50 mm (2") Mortar Cube Compression Device
NL 3027 X / 002 - P 003	40.1 x 40 x 160 mm Mortar Prism Compression Device
NL 4000 X / 005 - A 002	Computer Printer



MORTAR PRISM FLEXURAL DEVICE

Standard: EN 196/1, EN / ISO 679

Cement Compression & Flexural Testers

For flexural testing on 40.1 x 40 x 160 mm specimens. Made of steel. Two lower bearers with 100 mm span, upper longitudinal self-aligning bearer fitted to ball setting.

Technical Specifications :

Model Number	NL 3027 X / 002 – P 001
Specimen Size	40.1 x 40 x 160 mm
Dimension (mm)	160 (L) x 88 (W) x 169 (H)
Approx. Weight	5.6 kg



MORTAR CUBE COMPRESSION DEVICE [50 mm (2")]

Standard: UNE 83 120

Cement Compression & Flexural Testers

Technical Specifications :

Model Number	NL 3027 X / 002 – P 002
Specimen Size	50 x 50 x 50 mm
Dimension (mm)	115 Dia. x 175 (H)
Approx. Weight	5 kg



MORTAR PRISM COMPRESSION DEVICE (40.1 x 40 x 160 mm)

Standard: EN 196, ASTM C349 /
NF PIS-451, EN / ISO 679

Cement Compression & Flexural Testers

Technical Specifications :

Model Number	NL 3027 X / 002 – P 003
Specimen Size	Portions of 40 x 40 x 160 mm
Dimension (mm)	115 Dia. x 175 (H)
Approx. Weight	5 kg



FILTER PRESS FOR MUD

Determine of the Muds & Cement

Filter Press for Mud (LPLT) is the most effective means of determining the filtration properties of drilling muds and cement slurries. Measuring filtration behaviour and wall-cake building characteristic of a mud is essential to drilling fluid control and treatment. The characteristic of the filtrate, such as oil, water or emulsion content are also fundamentally important. The types and quantities of solid in the fluid and their physical and chemical interactions affect these characteristics. Temperature and pressure in turn affect the physical and chemical. It is therefore necessary to run test at both low-pressure/low-temperature and high pressure/high temperature. Each of these testing conditions requires different equipment and techniques.

This item consists of a mud reservoir mounted in a frame, a pressure source, a filtering medium, and a graduated cylinder for receiving and measuring filtrate. The basic unit has a cell assembly constructed of rustproof anodized aluminum and chrome plated brass and includes the required screen and gaskets.

Technical Specifications :

Model Number	NL 3028 X / 001
Filtration Area	45.6 cm ²
Working Pressure	0.69 Mpa
Amount of Drilling Fluid Injected	350 ml/unit Repetitive Error : 1.5 ml
Configuration	Stage Form
Overall Size	295 x 180 x 480 mm
Packing Size	620 x 300 x 490 mm

*1 Copy Of Manual Instructions

ECO-SMARTZ LOW STRENGTH TOUCH SCREEN COMPRESSION MACHINE

300 kN - 1000 kN
Standard: ASTM C39, AASHTO T22

Low Strength Compression

Special design for low strength compression specimen between 300 - 1000 kN such as mortar, light weight concrete, brick & etc with digital interface readout for high accuracy test result.

FEATURES:-

- *Advance digital readout with user friendly operation
- *Maximum overload & piston travel protection system
- *Light duty & rigid with 4 nos. prestressed column frame structure



Technical Specifications :

Model Number	NL 3029 X / 002
Capacity	300 - 1000 kN x 0.1 kN
Dimension Main Frame	300 (L) x 340 (W) x 1108 (H) mm
Dimension Smart Console	350 (L) x 400 (W) x 1158 (H) mm
Piston Ram Diameter	155 mm
Piston Stroke	50 mm
Horizontal Clearance	210 mm
Vertical Clearance	320 mm
Accuracy	±1.0%
Approx. Weight	420 kg
Power	220 V, 1 ph, 50 / 60 Hz, 750 W

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3029 X / 001 - P 001	Upper Spherical Compression Platen	1no.
NL 3029 X / 001 - P 002	Lower Compression Platen	1no.
NL 3029 X / 001 - P 003	Distance Piece Ø 158 x 100 mm	1no.
NL 3029 X / 001 - P 004	Distance Piece Ø 158 x 50 mm	1no.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3027 X / 002 - P001	Mortar Prism Flexural Device
NL 3027 X / 002 - P002	50 mm (2") Mortar Cube Compression Device
NL 3029 X / 001 - A 001	Set of Upper & Lower Block Compression Platen
NL 3029 X / 001 - A 002	Lower Compression Platen for 100 mm Cube
NL 4000 X / 002 - A 002	Mortar Flexural Compression Device
NL 4000 X / 002 - A 003	Mortar Cube Compression Device
NL 4000 X / 002 - A 004	40.1 x 40 x 160 mm Mortar Prism Device
NL MMP - 100	Mini Micro Printer c/w Cable
NL 3029 X / 001 - A 004	Printer Paper Roller (pack of 3 rolls)

DIGIMATIC COMPRESSION MACHINE (Low Strength) 300 - 1000 kN

Standard: EN 12390-3, EN 1338, EN 196-1/AASHTO T22/ASTM C39

Low Strength Compression

This semi-automatic compression machine special designed for specimen such as low strength concrete, brick, mortar and etc. User can request any maximum compression force (Between 300 to 1000 kN).

Unique Feature :-

- Front and side safety enclosed.
- Loading speed control knob.
- Grade 1.0 compression accuracy.
- 5 elements injection hydraulic pump.
- High tensile pre-stress 4 column frame.
- Rapid approach system for time saving.

Digimatic multi function controller :-

- Force value in kN & Mpa
- Max. force hold facility with real time force vs time graph display
- Multiple testing program can be selected
- Auto result saving up to 450 specimen
- RS 232 port for instant result printing
(Mini printer c/w cable **NEED order separately**)
- 115 x 65 mm high resolution LED screen

Technical Specifications :

Model Number	NL 3029 X / 003
Capacity & Sensitivity	300 till 1000kN (Upon request by user) x 0.1 kN
Max Vertical Clearance	228 mm
Max. Horizontal Clearance	240 mm
Compression Platen Size	Top : Ø220 mm, Bottom : 220 mm x 250 mm
Piston Ram Diameter & Travel	200 mm x 80 mm
Approx. Dimension (mm)	355(L) x 885 (W) x 1210 (H)
Approx. Weight	600 kg
Power	AC 220 V , 1ph, 0.75kW, 4.9 A, 50/60 Hz

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3029 X / 003 - P 001	Distance Piece Ø 118 x 45 mm	1pc.
NL 3029 X / 003 - P 002	Distance Piece Ø 118 x 25 mm	1pc.

*1 Copy of Manual Instruction

Optional Accessories :

Model Number	Accessories Description
NL 3029 X / 003 - A 001	Rectangular Bricle Test Platen Set
NL 3029 X / 001 - A 002	Lower Compression Platen (for 100 mm Cube)
NL 3027 X / 002 - P 001	Mortar Prism Mould
NL 3027 X / 002 - P 002	50 mm (2") Mortar Cube Compression Device
NL 3027 X / 002 - P 003	40.1 x 40 x 160 mm Mortar Prism Compression Devices
NL MMP - 100	Mini Printer
NL PPR - 100	Printing Paper

**NEW
2017**



Main Screen Display



Retrieving Sample Result with Graph Display

HUMIDITY CHAMBER

Standard: EN 196-1, EN 12390-2, EN 12390-9

Temperature & Humidity Control

Ideal for curing of cement & other specimens that require consistent temperature & humidity control. Easy to use & clear touch screen display panel provides user friendly operation, even for beginners. Constructed using full stainless steel material ensure long life span & fitted with transparent glass for easy viewing. Various types of safety warnings to protect chamber from abnormal operation.

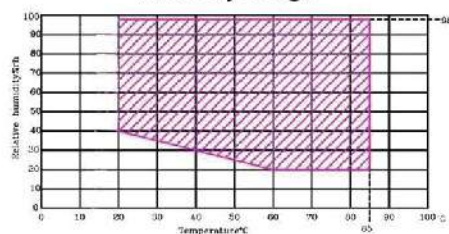
Technical Specifications :

Model Number	NL 3030 X / 006	NL 3030 X / 007
Capacity	408 Liter	225 Liter
Power Supply Source	AC 415V, 50/60 Hz, 3 phase, 15 A	
Temperature Range	- 40°C ~ +150°C (0.01°C resolution)	
Temperature Accuracy	±1°C	
Humidity Range	20% ~ 98% RH (0.1 % resolution)	
Control Accuracy	±0.5°C / ±2.5 % RH	
Working Environment	10°C ~ 38°C , Max 75 % RH	
Cooling Speed	1°C / Min in average (without loading)	
Heating Speed	1°C / Min in average (without loading)	
Internal Chamber Material	SUS#304 Stainless Steel, Mirror Finished	
External Chamber Material	Fully Stainless steel	
Cooling Method	Air Cooling	
Controller	Korea, TEMI 800 Controller LCD Touch Screen, programmable control temperature & humidity. Can set different parameter for cyclic test	
Insulation Material	50 mm high density rigid Polyurethane foam	
Heater	Explosion-proof type SUS#304 Stainless Steel fins radiator pipe heater	
Compressor	France, Tecumseh compressor	
Lighting	Heat Resistance	
Temperature Sensor	PT-100 dry & wet bulb sensor	
Observation Window	Tempered Glass	
Testing Hole	Diameter 50mm, for cable routing	
Safety Protection Device	Protection for leakage, over-temperature, compressor overvoltage & overload, heater short circuit and water shortage	
Internal Dimensions (WxDxH)	600 x 800 x 850 mm	500 x 600 x 750 mm
External Dimensions (WxDxH)	1045 x 1375 x 1750 mm	1000 x 1175 x 1645 mm
Approx. Weight	360 kg	300 kg

*1 Copy of Manual Instruction



Humidity Range



MAIN COMPONENTS



France Tecumseh Compressor



Korea TEMI 800 Controller

HUMIDITY CHAMBER (E-Version)

Standard: EN 196-1, EN 12390-2, EN 12390-9

Temperature & Humidity Control

Basic type humidity chamber specialty designed for construction material such as concrete, cement, mortar and etc. for accelerated curing test. Fully stainless steel at inner chamber and external casing, against humidity corrosion, the unit come with portable humifier, heating element and air compressor connected with digimatic control unit for reliable and high accuracy test performance.

Technical Specifications :

Model Number	NL 3030 X / 011
Capacity	360 litres
Humidity Control	90% above $\pm 5\%$
Minimum Temperature	20° $\pm 2^{\circ}\text{C}$
Resolution of Temperature	$\pm 0.1^{\circ}\text{C}$
Temperature Different	$\leq \pm 2^{\circ}\text{C}$
Heating Power	1000 W
Power of Compressor	150 W
Chamber Space (LxWxH)	490 x 720 x 1080 mm
Dimension (LxWxH)	700 x 1210 x 1540 mm
Appx.Weight	125 kg
Power	16 Amp, 220 V, 1ph, 50/60 Hz

Set Consist Of:

Model Number	Parts Description	Qty
NL 3030 X 011 - P 001	Stainless Steel Sieve	5 nos.
NL 3030 X 011 - P 002	Portable Humifier	1 unit

*1 Copy of Manual Instructions



Internal



Controller



NL 7074 X / 001

ECO-SMARTZ MORTAR MIXER 5 LITRES

Standard: EN 196-1, EN 196, ASTM C 305, AASHTO T 162, ISO 679-1989

Mixing of Cement Mortar

This apparatus has specially been designed to prepare cement mortar for strength determination as specified in standard. It can also be used in mixing lime with pozzolonic materials for determination of lime reactivity (as per IS 1727) & for uniform mixing of soils with additives such as lime, cement, etc.

Technical Specifications :

Model Number	NL 3031 X / 005
Capacity	5 Litres
Planetary Speeds	62 x 125 r.p.m.
Spindle Speeds	140 x 285 r.p.m.
Dimension (mm)	480 (L) x 260 (W) x 740 (H)
Approx. Weight	45 kg
Power	220 V, 1 ph, 50 / 60 Hz, 0.5 Hp

Unit Consists Of :

Model Number	Parts Description	Qty
NL 3031 X / 001 – P 001	Mixing Bowl 5 Litres	1no.
NL 3031 X / 001 – P 002	Plastic Funnel	1no.
NL 3031 X / 001 – P 003	Mixing Beater	1no.

*1 Copy of Manual Instruction

Spare Parts :

Model Number	Parts Description
NL 7074 X / 001	Reference Sand (EN 196-1) 1350 g / pack



AUTOMATIC MORTAR & FLEXURAL COMPRESSION TEST MACHINE

Standard: EN 196/1, 459-2, 13454-2 ; ASTM C109, C348, C349; BS 3892-1, 4551-1

Cement Compression & Flexural Testers

This machine is designed for flexural compression test of cement mortar equipped with two loading frames with two independent measuring ranges for better and consistent performance. It's fully automatic computer controlled provides constant loading rate for both compression and flexural test. The advanced and user friendly computer software enables results to be acquired automatically with the test curve display and result database being saved virtually unlimited inside the computer. Suitable for testing on flexural and compression of 40 x 40 x 160 mm mortar prism and compression of 50 mm mortar cubes. Supplied complete with computer set and printer.

Software Super Test 7.2

- User friendly to RUN the operation
- Real time display of load
- Unlimited saving of test results
- Test report can be printed immediately after rest

Technical Specifications :

Model Number	NL 3033 X / 002	
Type	Compression	Flexural
Max.Capacity	300 kN	15 kN
Piston Stroke	50 mm	
Speed Control Range	0.1 ~ 10 kN/s	5 ~ 200 N/s
Speed Control Accuracy	±5.0 %	
Load Accuracy	±1.0 %	
Resolution	0.01 kN	0.1 N
Platen Size	Ø120 & Ø168	Ø120 mm
Overall Dimensions	500(W) x 1200 (L) x 1500 (H) mm	
Power	220 V, 250 W, 1 ph, 50/60 Hz	
Approx. Weight	460 kg	

Unit Consists Of :

Model Number	Parts Description	Qty
NL STS - 7.2	Super Test Software 7.2	1no.
NL 4000 X / 005 - P 002	Latest Version Computer Set	1no.
NL 4000 X / 005 - A 002	Computer Printer	1no.
NL 3033 X / 002 - P001	Concrete Flexural Device	1no.
NL 3033 X / 002 - P002	Compression Jig Set	1no.

*1 Copy of Manual Instruction

Optional Accessories :

NL 3027 X / 002 - P001	Mortar Prism Flexural Device
NL 3027 X / 002 - P002	50 mm (2") Mortar Cube Compression Device
NL 3027 X / 002 - P003	40.1 x 40 x 160 mm Mortar Prism Compression Device



NL 3027 X 002 - P 001



NL 3027 X 002 - P 002



NL 3027 X 002 - P 003

**NEW
2018**


BAROID MUD BALANCE (Fully Stainless Steel)

Standard: API 13B-2

Mud Testing

It is use to provide a simple method to determine accurately the mud density. This apparatus consists of a base and graduated arm with cup, lid, knife edge, rider, built-in spirit level and counter-weight, carrying case. The constant volume cup is affixed to one end of the graduate arm & the counter-weight on the opposite end.

Technical Specifications :

Model Number	NL 3034 SS / 001
Measuring Range	0.96 - 3.0 g/cm ³ (8.0 - 25 PPG)
Product Dimension (mm)	480 (L) x 100 (W) x 120 (H)
Carry Case Dimension (mm)	500 (L) x 150 (W) x 100 (H)
Approx. Product Weight	1.2 kg
Approx. Total Weight	1.8 kg

*1 Copy Manual Instruction



MINI SLUMP CONE TEST APPARATUS (STAINLESS STEEL)

Workability & Consistency

For the determination of the consistency, the medium & high workability of fresh concrete. Made from galvanized steel.

Slump Cone

*Top Diameter: 50 mm

*Base Diameter: 100 mm

*High: 150 mm

Technical Specifications :

Model Number	NL 3035 SS / 002
Approx. Weight	2.9 kg
Material	Stainless Steel

Set Consist Of:

Parts / Material	Stainless Steel
Slump Cone	NL 3035 SS / 003 – P 001
Tamping Rod	NL 3035 SS / 003 – P 002
Base Plate	NL 3035 SS / 003 – P 003

Optional Accessories:

Model Number	Accessories Description
NL 3035 X / 002 – A 001	Carrying Case with Lock
NL 7055 X / 002	Steel Ruler 300 ml
NL 7035 SS / 005	Stainless Steel Scoop 115 x 84 x 40 mm



TRANSPARENT ACRYLIC MINI SLUMP CONE TEST APPARATUS

Workability & Consistency

For the determination of the consistency, the medium and high workability of fresh concrete. Made from transparent acrylic and stainless steel.

Slump Cone

*Top Diameter: 50 mm

*Base Diameter: 100 mm

*High: 151 mm

Technical Specifications :

Model Number	NL 3035 X / 002
Approx. Weight	4.4 kg

Set Consist Of:

Model Number	Parts Description	Qty
NL 3035 X / 002 – P 001	Slump Cone	1no.
NL 3035 SS / 003 – P 002	Stainless Steel Tamping Rod	1no.
NL 3035 SS / 003 – P 003	Stainless Steel Base Plate	1no.

Optional Accessories:

Model Number	Accessories Description
NL 3035 X / 002 – A 001	Carrying Case with Lock
NL 7055 X / 002	Steel Ruler 300 ml
NL 7035 SS / 005	Stainless Steel Scoop 115 x 84 x 40 mm



AIR ENTRAINMENT METER(1 LITRE)

Standard: ASTM C185,AASHTO T152,BS 1881,EN 12350-7

Air Content/Setting Time

This product used to determine the air content in cement mortar, cement paste and lime mortar. Connected to a dial gauge directly the air entrainment in range of 0 - 50 %. It is cast aluminium built,the test pot and upper part are air-tight sealed.

Technical Specifications :

Model Number	NL 3036 X / 003
Capacity	1 Litre
Approx. Weight	5.1 kg
Air Content Range	0 - 100 %
Pressure Range	0 - 0.1 mpa
Reading From Display	A Pressure Gauge,with Readings in percent

Unit Consist Of:

Model Number	Parts Description	Qty
NL 3036 X / 003 - P001	50 mm Tube Hose	1no.
NL 7055 X / 002	300 mm Steel Ruler	1no.

*1 Copy of Manual Instruction



AIR ENTRAINMENT METER 1 LITRE CAPACITY

Standard: EN 413/2 – DIN 1164

Air Content / Setting Time

This product used to determine the air content in cement mortar, cement paste and lime mortar. Connected to a dial gauge directly the air entrainment in range of 0 – 50%. It is cast aluminium built, the test pot and the upper part are air-tight sealed. The product is identical to model NL 3034 X / 001 but the process using an electric mini-compressor that give air pressure and keeping it constant during a test.

Technical Specifications :

Model Number	NL 3036 X / 001	NL 3036 X / 002
Dimension	Ø 200 x 320 mm	Ø 200 x 320 mm
Approx. Weight	4 kg	6 kg
Power	–	240 V, 50 / 60 Hz, 1 ph

*1 Copy Of Manual Instructions

THREE GANG MOULD FOR PRISMS

Standard: EN 196/1

Preparation of 40 x 40 x 160mm prisms, 50mm & 70.7mm Mortar Cubes

Used for cast beam mortar specimens.

Technical Specifications :

Model Number	NL 3006 X / 001 - A 001
Material	Carbon Steel & Cast Iron
Dimension (mm)	40 (L) x 40 (W) x 160 (H)
Hardness	Over 200 HV



Technical Specifications :

Model Number	NL 3037 X / 001
Material	Carbon Steel
Dimension (mm)	40.1 (L) x 40 (W) x 160 (H)
Hardness	Over 200 HV



Technical Specifications :

Model Number	NL 3037 X / 002
Material	Carbon Steel
Dimension (mm)	40.1 (L) x 40 (W) x 160 (H)
Hardness	Over 500 HV





TENSILE JAWS "8" SHAPE AND BRIQUETTE MOULD

Standard: ASTM C 307, BS 6319-7

Tensile Strength

To determine the tensile strength of resin based mortars and concretes xcast in the form of dumb-bell shaped briquette test specimen.

Technical Specifications :

Model Number	NL 3038 X / 001
Product Description	Tensile Jaws "8" Shape (pair of 2 pcs)
Approx. Weight	1.5 kg (2 pcs weight)

Set Consist Of:

Model Number	Parts Description	Qty
NL 3038 X / 001 – P 001	"8" Shape Briquette Mould (2 kg)	1no.