

# NIMET

WHERE  
INNOVATION  
LIVES

H9

WELDED COLD DRAWN TUBES,  
INSIDE SMOOTH AS DRAWN OR HONED

WELDED COLD DRAWN TUBES,  
INSIDE SMOOTH AS DRAWN OR HONED

H9

NIMAX H9 - E355+C, EN 10305-2

The distinctive properties of the welded ready to use tubes are tight tolerances, high concentricity and excellent surface finish.

## STEEL GRADES CORRESPONDENTS

EN	Werkstoff	DIN	B.S.	UNI	JIS	GOST	AISI / SAE / ASTM
E355	1.0580	St52	CFS5	Fe510	STKM19A	St6sp	1524 / 1024

## CHEMICAL COMPOSITION - IN % BY WEIGHT

Steel grade	C	Si	Mn	P	S	Cr	Mo	Ni	V	Cu	N
E355	max. 0.22	max. 0.55	max. 1.60	max. 0.025	max. 0.025	-	-	-	-	-	-

\*Cr+Mo+Ni = max. 0.63

## MECHANICAL PROPERTIES

Steel grade	Tensile strength	Yield point	Elongation (longitudinal)	Impact energy (longitudinal direction)	Hardness ***	Norm
	R <sub>m</sub> N/mm <sup>2</sup>	R <sub>p0.2</sub> N/mm <sup>2</sup>	A <sub>5</sub> %	KV <sub>2</sub> J	Brinell N/mm <sup>2</sup>	
E355+C	min. 640	min. 540 ****	min. 4	-	min. 185	EN 10305-2

C = cold drawn

\* Wall thickness ≤ 12 mm

\*\* On request

\*\*\* The hardness values is for information only

\*\*\*\* The Yield Point value is for information only

WELDED COLD DRAWN TUBES,  
INSIDE SMOOTH AS DRAWN OR HONED

H9

NIMAX H9 - E355+C, EN 10305-2

The distinctive properties of the welded ready to use tubes are tight tolerances, high concentricity and excellent surface finish.

Outside diameter - OD  $\varnothing 30 - 125$  mm

Inside diameter - ID  $\varnothing 20 - 110$  mm

Inside tolerance - ID ISO H9/ISO H10

Outside tolerance - OD according to EN 10305-2

Roundness - ID within the limits of diameter tolerances

Standard lengths mill lengths / on request, cut to fix lengths pieces

Surface roughness - ID Ra: max. 0.40  $\mu\text{m}$  for honed surface

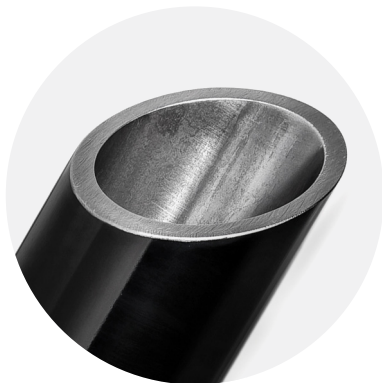
Ra: max. 0.60  $\mu\text{m}$  for smooth surface, ready to use

Straightness local deviation max. 1 mm / 1000 mm

Straightness total deviation max. 3.5 mm for tubes with length up to 6000 mm  
for tubes with length more than 6000 mm, for each meter over this length, the tolerance must be increased by 0.5 mm

### TABLE OF DIMENSIONS ID TOLERANCE

Diameter mm	ISO H9 $\mu\text{m}$	ISO H10 $\mu\text{m}$
$30 < \varnothing \leq 50$	0 / +62	0 / +100
$50 < \varnothing \leq 80$	0 / +74	0 / +120
$80 < \varnothing \leq 110$	0 / +87	0 / +140



A good roundness and a high ID precision are achieved during the cold drawing process of the welded tubes, so called "ready to use" or ready for the assembly of hydraulic and pneumatic cylinders.



Additionally, the tubes can be honed, conferring the inside surface a better precision. The special texture obtained permits oil storage and helps the system to work properly and well lubricated, even after a long period of inactivity.

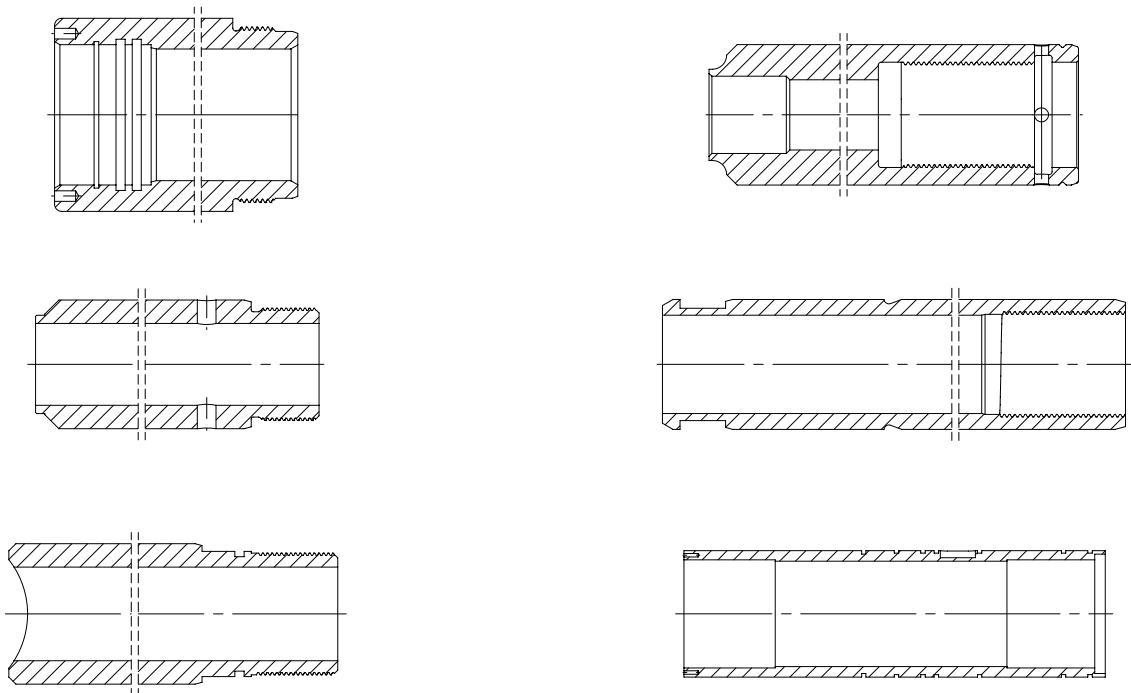
WELDED COLD DRAWN TUBES,  
INSIDE SMOOTH AS DRAWN OR HONED

H9

NIMAX H9 - E355+C, EN 10305-2

The distinctive properties of the welded ready to use tubes are tight tolerances, high concentricity and excellent surface finish.

## CUSTOMIZED MACHINING



## STORAGE AND HANDLING RECOMMENDATIONS

- Keep the products stored in dry and covered spaces.
- Do not expose for a long time the bars or tubes to the sunlight or to very low temperatures.
- For storage, preferable to use rubber supports or wood lined supports; direct contact with the floor and steel supports that are not lined with soft materials must be avoided.
- Whenever possible, please use the crane to load or unload the bundles; when you use the fork lifts please avoid the direct contact of the forks with the products.
- Always lift the bundles using textile slings. Don't use metal slings during handling of bundles.
- Always keep dry the cardboard tubes that protect the chromed products.



**NIMET** SRL

Targului Street 103, 137121 / Lazuri (DB) / Romania  
Tel: +40 245 607 000 / Fax: +40 245 607 001 / office@nimet.ro

**NIMET.RO**