DATA SHEET
TETRA 220

Member of HAEUSLER Group

ROLLmeister | Baselstr. 21 | 4202 Duggingen | Switzerland

Phone: +41 (0) 61 755 28 00
Fax: +41 (0) 61 755 28 01
info@roll-meister.com

BASIC EQUIPMENT

Surface lengths of rolls		2‘600 mm
Diameter of rolls	Top roll	320 mm
	Bottom roll	290 mm
	Side roll	230 mm
Smallest bending diameter on Top roll		370 mm, depending on spring back
Number of rolls		4
Bearing of rolls		permanently lubricated roller bearings (SKF, FAG, INA)
Max. operating force against Top roll		1’020 kN
Material of rolls		high alloyed steel, **42 CrMo 4**
Driven rolls in standard execution		1 (Top roll)
Driven rolls (optionally)		2 (Top and Bottom roll)
Roller drive		E-motor with planetary gear *(Efficiency > 90%)*
Operating speed		**0 – 8 m/min, stepless**
Speed compensation between Top and Bottom roll		automatic
Installed power		10 kW (14 HP)
Total weight		11’500 kg

BASIC EQUIPMENT

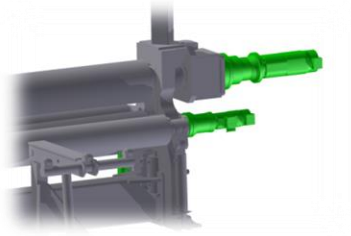
Controlling	**7-axis CNC control included** (19” touchscreen)
EMV	Interference resistance: according to EN 61000-6-2 Emitted interference: according to EN 61000-6-4
FCC Approval	for the U.S. and Canada (Federal communications commission, radio frequency interference statement)
Safety Standard	CE, UL/CUL
EMC Standards	89/336/EEC, FCC 47 CFR Part, Class A
Adjustment of rolls	hydraulic
Tilting of Bottom and both Side rolls for cone bending	stepless from themobile control desk
Tilting of the hinged front bearing housing	hydraulic
Indication of the Side rolls position reading accuracy 0,1 mm	4 x digital,
Indication of the Bottom roll position	2 x digital, reading accuracy 0,1 mm
Lubrication	automatic central lubrication
Fixation of Top and Bottom rolls during pre-bending procedure	through electro-mechanical holding brakes
Overload protection	through overload valves
Standards	The execution corresponds to CE machine rules
Overall dimensions	(L x W x H) approx. 4'900 x 1'050 x 1'600 mm (without optional equipment)
Ambient temperature in standard execution	5°C – 45°C

ROLLmeister | Baselstr. 21| 4202 Duggingen | Switzerland | www.roll-meister.com

OPTIONAL EQUIPMENT

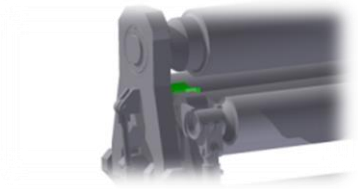
- **Two rolls drive**

  Additionally the Bottom roll will be driven
  by electric motor and planetary gear



- **Cone bending device**

  for bending cones from an angle bigger than 5°



- **Upper support**

  Hydraulically adjustable
  for maximum bending diameter of 5'000 mm
  Maximum supporting force 50 kN

- **Lateral side support**

  Hydraulically adjustable
  Supporting rolls 1
  Maximum supporting force 35 kN

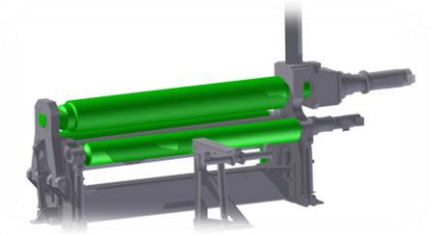
- **Remote maintenance**

  TCP/IP Ethernet protocol for remote connection

OPTIONAL EQUIPMENT

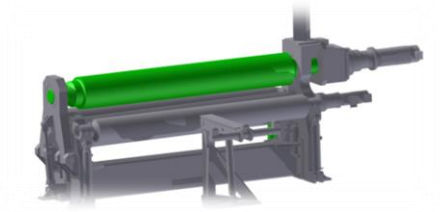
- **Hardened rolls**

  Up to hardness of HRC 52 – 54



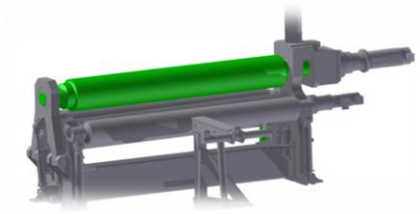
- **Enlarged Top and Bottom roll diameter**

  For further minimization of roller deflection
  Top roll diameter 340 mm
  Bottom roll diameter 310 mm



- **Interchangeable Top roll**

  For minimization of the smallest possible bending diameter. The smallest possible interchangeable Top roll diameter is 270 mm



- **Country adaption / Climate package**

  Heating device for ambient temperatures < 5°C
  Cooing device for ambient temperatures > 45°C

- **Service / Training**

  Commissioning and training through our installation supervisors for the duration of one week (5 working days, each 8 working hours)

BENDING CAPACITY

Pre-bending capacity with standard Top roll diameter 320 mm

Width of plate	Yield point	Internal bending diameter	Plate thickness	Pre-bending factor
[mm]	[N/mm^2]	[mm]	[mm]	[ ]
2‘600	260	1‘000	16	3,75
2‘600	260	5‘000	18	4,10
2‘600	355	1‘000	13	4,47
2‘600	355	4‘000	15	5,06

For further capacities please check additional capacity charts

Rounding capacity with standard Top roll diameter 320 mm

Width of plate	Yield point	Internal bending diameter	Plate thickness
[mm]	[N/mm^2]	[mm]	[mm]
2‘600	260	2‘000	20
2‘600	260	5‘000	22
2‘600	355	1‘000	15
2‘600	355	5‘000	18

For further capacities please check additional capacity charts

<u>Cone bending capacity for cones with angle bigger 5°</u>

- continuous bending approx. 75% of pre-bending capacity
- press method approx. 100% of pre-bending capacity