

**Rolling mill equipment and rolls.
 Cross-cutting shears**

CROSS-CUTTING SHEARS WITH ROLLING CUT



“Severstal”, St. Petersburg, TJIC
 5000 plate mill



“AMZ”, Asha,
 TJIC 2800 plate mill

Specification

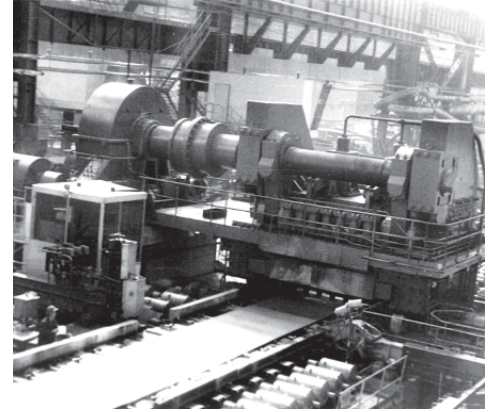
Company	“Severstal” TJIC 5000 plate mill	“AMZ” TJIC 2800 plate mill
Application	Cutting head and tail ends, cutting to length	
Type	stationary	
Drive	electromechanical	
Cut plate specification: - plate thickness, mm - plate width, mm	10...50	5...50
	up to 4800	1400..2600
Tensile strength: - thickness up to 40 mm, MPa - thickness up to 50 mm, MPa	1200	1000
	700	
Cutting force, MH	17,5	12
No. of cuts per minute	up to 16	
Mouth of shears, mm	226	
Length of cut sheets, m	4..12	

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GUILLOTINE CROSS-CUTTING SHEARS

Specification

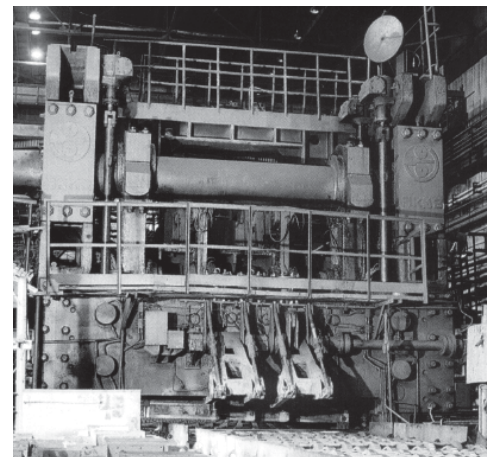
Company	Metallurgical works, Częstochowa
Application	Cutting head and tail ends, cutting to length
Type	stationary
Drive	electromechanical
Cut plate specification: - plate thickness, mm - plate width, mm	up to 40 up to 3450
Material tensile strength, MPa	1200
No. of cut per minute	up to 7
Mouth of shears, mm	137
Cutting force, MN	12



Metallurgical works,
Częstochowa (Poland)
Commissioned in 1971.

Specification

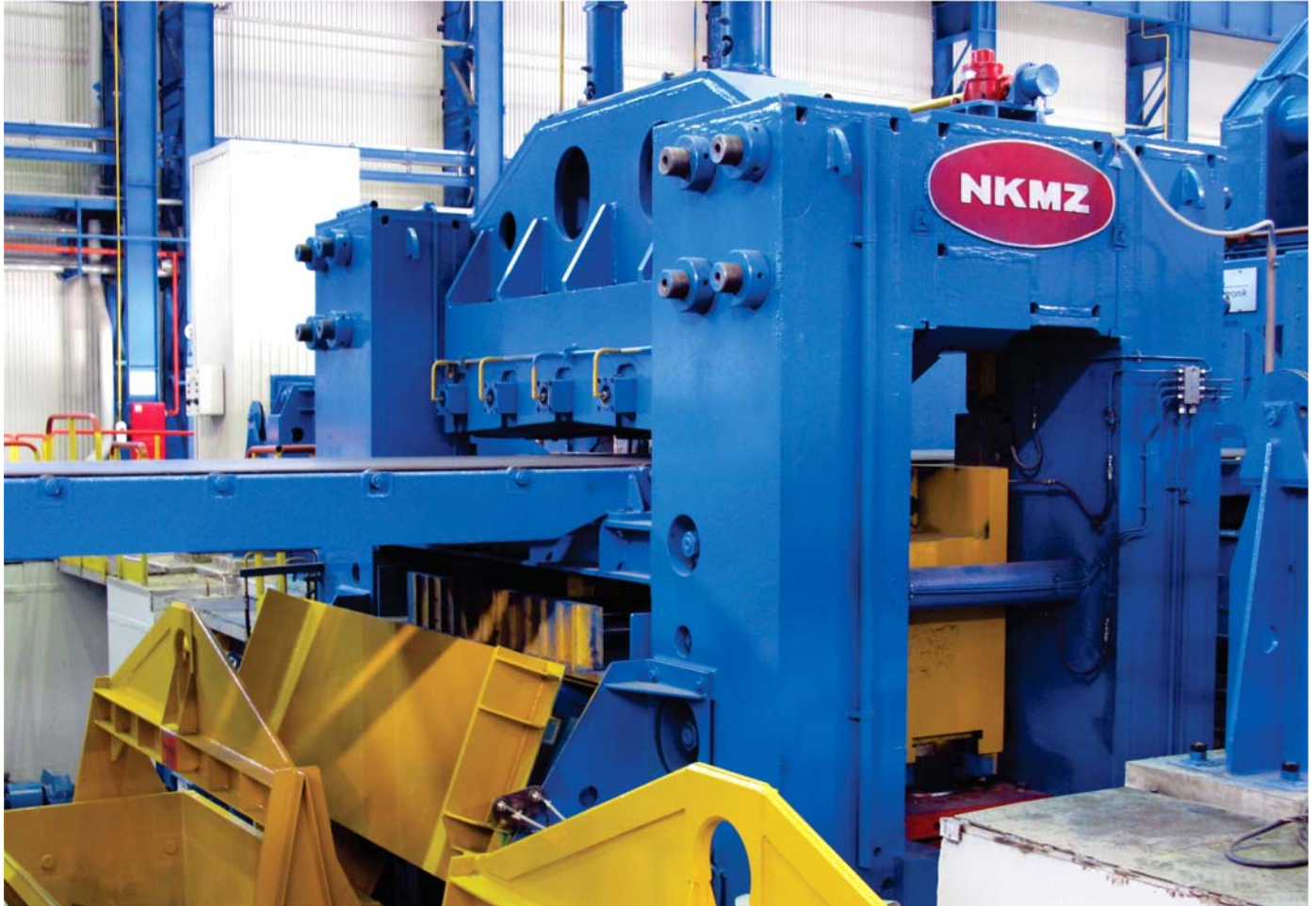
Company	«Ilyich Iron and Steel Works of Mariupol 3000-mm plate mill
Application	Cutting head and tail ends, cutting to length
Type	Stationary
Drive	Electromechanical
Cut plate specification: - plate thickness, mm - plate width, mm	5...25 650..2850
Material tensile strength, MPa	up to 900
Temperature, °C	up to 800
No. of cuts per minute	up to 9
Mouth of shears, mm	97
Cutting force, MN	7



Ilyich Iron and Steel Works of
Mariupol, commissioned 1983.

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GUILLOTINE CROSS-CUTTING SHEARS WITH HERRINGBONE CUT



Specification

Company	“Magnitogorsk Iron and Steel Works” AIP 5...25x2350
Application	cutting front and tail ends of sheet (strip)
Type	Stationary
Drive	Hydraulic
Cut plate specification: - plate thickness, mm - plate width, mm - max. tensile strength, MPa	5...25 1000...2350 1000
Cutting force, MH	6,3
Upper herringbone blade tilt angle, deg.	3

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GUILLOTINE CROSS-CUTTING SHEARS



Specification

Company	PrSC “Donetsksteel” – metallurgical plant”, Donetsk
Application	cutting sheets to narrow candy
Type	stationary
Drive	electromechanical
Cut plate specification: - plate thickness, mm - plate width, mm - Tensile strength of the material, MPa	8,10,12 500...750 370...480
Width of candy, mm	20 ± 0,5
Max. No. of cuts per minute	24
Mouth of shears, mm	60
Cutting force, max. MN	0,75

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STRIP-CUTTING SHEARS



Specification

Company	“TTZ”, Tashkent (Uzbekistan), 450-mm section mill
Application	cutting head end of the strip upstream of finishing rolling
Type	stationary
Drive	hydraulic
Cut strip specification: - strip thickness, mm - strip width, mm - max. tensile strength at rolling t , MPa	10...20 160...320 70
Cutting force, MN	0,26
Temperature of cut strip, °C	950...1000

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FLYING DRUM-TYPE CROSS-CUTTING SHEARS



Specification

Company	“Magnitogorsk Iron and Steel Works”, 2500-mm hot rolling mill
Application	cutting head and tail ends of moving semi-finished rolled products, fed into finishing train
Type	flying
Drive	electromechanical
Cut strip specification: - strip thickness, mm - strip width, mm - max. tensile strength at rolling t , MPa - temperature, °C	25...65 1000...2350 80 850...1100
Cutting force, MN	5,3
Max. resultant torque, kNm	2400
Strip movement speed, m/s	0,3...2,5
Plan form of strip head end – herringbone with height of, mm	50
Plan form of strip tail end	straight line

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FLYING DRUM-TYPE CROSS-CUTTING SHEARS



Specification

Company	“Severstal”, Cherepovets, HIIP No.3
Application	Cutting strip to length
Type	Flying
Drive	electromechanical
Material of cut strip	Carbon steel
Tensile strength of the material, MPa	up to 650
Strip thickness, mm	0,5-2,5
Strip width, mm	500...1600
Length of cut sheets, mm	500...6000
Allowance on the length of cut sheets, mm	0...+1
Working speed of strip movement, m/s	0,5-5
Blade cutting edge trajectory diameter, mm	760
Cutting force, MN	0,361

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FLYING GUILLOTINE CROSS-CUTTING SHEARS WITH HERRINGBONE CUT



Specification

Company	“Magnitogorsk Iron and Steel Works”, AIP 5...25x2350
Application	Cutting strip to length
Type	Flying
Drive	Hydraulic
Cut strip specification: - strip thickness, mm - strip width, mm - max. tensile strength, MPa	5...25 1000...2350 1000
Characteristics of obtained products	Sheets with length of 3...12 m
Cutting force, MN	6,3
Speed of strip movement, m/s	0,2...0,6
Max. stroke of shears, mm	3500
Upper herringbone blade tilt angle, deg.	3