

# TOOLING

## CONVERSION:

1 mm = 0.039"  
 1 meter = 3.28 ft.  
 1 t/m = 0.336 t/ft. (US)  
 1 kg = 2.205 lb.  
 1 kg/m = 0.672 lb/ft.

## FACT SHEET TOOLING AND EXTENDERS

Remarks

### Accuracy

Working surface precision

### Durability

High tensile CrMo steel alloy  $\geq 1000$  N/mm<sup>2</sup>

High quality tool steel 600-720 N/mm<sup>2</sup>

Bending radii are CNC-Deeaphardened<sup>®</sup> to minimum 56° HRC, depth  $\geq 4$  mm

Bending radii are CNC-Deeaphardened<sup>®</sup> to minimum 52° HRC, depth  $\geq 2$  mm

OZU-ZN (for galvanized sheet)

### Flexibility

Easy reversibility because of symmetrical adaption

ATC possible (Gripper, TIPS<sup>®</sup>)

Vertical\* + horizontal loading \*Safety-Clicks<sup>®</sup> required with top tools

Top (BIU/HU/TSU) suitable for all New Standard Premium and Pro Top Tool Holders

Top (BIU/HU/TSU with AS II adaption) suitable for all American Style Top Tool Holders

Bottom (OZU/HU/THU/DD) suitable for all Bottom Tool Holders

Bottom tools V  $\leq 60$ mm equipped with V-Lock<sup>®</sup>

Bottom (OZU/DDU/HU/THU) have 13 mm adaption designed for use on all press brakes with a Clamping Slot 13.5x 22( WxH)

Available with E2M<sup>®</sup>

Available with NS III or NS IV adaption

Bottom tools equipped with NS VI adaption

Available standard lengths	/1 L=515 mm	/2 L=550 mm sectioned	/3 L=200 mm sectioned	/4 L=150 mm	/6 L=200 mm	/7 L=20 inch	/8 L=18.5 inch	/9 L=2x4 inch	/10 L=475 mm sectioned	/11 L= 200 mm sections	/12 L=255 mm
	●	●	●	●	●	●	●	●	●	●	●
	●	●	-	●	●	-	●	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-
	●	●	-	●	●	-	●	-	-	-	-

Max. length

### Speed

Automatically adjustable V-opening

Automatic seating and aligning of the tooling

Fast tool changing

Adjustment CNC H

Use of Safety-Clicks<sup>®</sup>  $\leq 12.5$  kg

Use of E2M<sup>®</sup>

### Safety

Equipped with Safety-Clicks<sup>®</sup> up to 12.5 kg

Equipped with Safety-Pins > 12.5 kg

Equipped with E2M<sup>®</sup> >12.5 kg

Remarks	New Standard Premium top and bottom tools														American Style	American Vintage	Adjustable bottom tools		Flattening tools	Inserts	Tool Extenders	
	New Standard Premium	New Standard HD Premium		New Standard BM Premium	New Standard OM Premium	New Standard Pro	New Standard Pro	Multi-V Matic	Multi-V	DDU	INZU RU	TSU/HU/TS	HU/THU/DD/OB 958									
		Top	Bottom											Tools with special geometry			Top	Bottom				
Working surface precision	+++	+++	+++	+++	+++	++	++	++	++	++	++	++	++	++	++	++	++	++				
High tensile CrMo steel alloy $\geq 1000$ N/mm <sup>2</sup>	●	●	●	●	●	-	●	-	●	●	-	-	-	-	-	-	0 (DD)					
High quality tool steel 600-720 N/mm <sup>2</sup>	-	-	OZU-HD	-	-	●	-	●	-	-	●	●	●	●	●	●	●					
Bending radii are CNC-Deeaphardened <sup>®</sup> to minimum 56° HRC, depth $\geq 4$ mm	●	●	●	●	●	-	●	-	●	●	-	●	-	-	-	-	-					
Bending radii are CNC-Deeaphardened <sup>®</sup> to minimum 52° HRC, depth $\geq 2$ mm	-	-	-	-	-	●	-	●	-	-	●	-	-	-	-	-	-					
OZU-ZN (for galvanized sheet)	○	-	-	○	○	○	○	○	-	-	-	-	-	-	-	-	-					
Easy reversibility because of symmetrical adaption	●	●	●	●	●	●	●	●	-	-	-	-	-	-	●	-	-					
ATC possible (Gripper, TIPS <sup>®</sup> )	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Vertical* + horizontal loading *Safety-Clicks <sup>®</sup> required with top tools	●	●	-	●	-	●	●	●	-	-	-	-	-	-	●	●	●					
Top (BIU/HU/TSU) suitable for all New Standard Premium and Pro Top Tool Holders	●	●	-	●	-	●	-	●	-	-	-	-	-	-	●	-	-					
Top (BIU/HU/TSU with AS II adaption) suitable for all American Style Top Tool Holders	-	-	-	-	-	-	●	●	-	-	-	-	-	-	●	-	-					
Bottom (OZU/HU/THU/DD) suitable for all Bottom Tool Holders	●	-	●	-	-	●	●	●	-	-	-	-	-	-	-	-	●					
Bottom tools V $\leq 60$ mm equipped with V-Lock <sup>®</sup>	●	●	-	●	-	●	●	●	-	-	-	-	-	-	●	●	●					
Bottom (OZU/DDU/HU/THU) have 13 mm adaption designed for use on all press brakes with a Clamping Slot 13.5x 22( WxH)	●	-	●	-	-	●	●	●	○	○	●	-	-	-	-	-	-					
Available with E2M <sup>®</sup>	○	○	○	○	○	○	-	-	-	-	-	-	-	-	○	○	○					
Available with NS III or NS IV adaption	-	-	-	-	○	-	-	-	-	-	-	-	-	-	-	-	-					
Bottom tools equipped with NS VI adaption	●	-	●	-	●	●	●	●	-	-	●	-	-	-	-	-	●					
/1 L=515 mm	●	●	●	●	●	●	●	-	-	-	●	●	●	●	●	●	●					
/2 L=550 mm sectioned	●	●	-	●	●	-	●	-	-	-	-	-	-	-	-	-	-					
/3 L=200 mm sectioned	●	●	-	●	●	-	●	-	-	-	-	-	-	-	-	-	-					
/4 L=150 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-					
/6 L=200 mm	●	●	-	●	●	-	●	-	-	-	-	-	-	-	-	-	-					
/7 L=20 inch	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	-					
/8 L=18.5 inch	-	-	-	●	●	●	-	●	-	-	-	-	-	-	-	-	-					
/9 L=2x4 inch	●	-	●	●	●	-	-	●	-	-	-	-	-	-	-	-	-					
/10 L=475 mm sectioned	-	-	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-					
/11 L= 200 mm sections	●	-	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-					
/12 L=255 mm	●	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-	-					
Max. length	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	515 mm 20 inch	6200 mm	-	515 mm 20 inch	515 mm 20 inch	515 mm 20"/TS machine length	515 mm 20"/DD +OB 958 machine length	-	-	-					
Automatically adjustable V-opening	-	-	-	-	-	-	-	-	6-51 mm	24-400 mm	-	-	-	-	-	-	-					
Automatic seating and aligning of the tooling	●	●	●	●	●	●	●	●	-	-	●	-	●	●	●	●	●					
Fast tool changing	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
Adjustment CNC H	-	-	-	-	-	-	-	-	●	○	-	-	-	-	-	-	-					
Use of Safety-Clicks <sup>®</sup> $\leq 12.5$ kg	●	●	-	●	○	●	●	●	-	-	-	-	-	-	(TSU/4)	-	-					
Use of E2M <sup>®</sup>	○	○	○	○	○	○	-	-	-	-	-	-	-	-	○	○	○					
Equipped with Safety-Clicks <sup>®</sup> up to 12.5 kg	●	●	-	●	○	●	●	●	-	-	-	-	-	-	(TSU-028/030)	-	-					
Equipped with Safety-Pins > 12.5 kg	●	●	-	●	-	●	●	●	-	-	-	-	-	-	●	●	(HU/THU)					
Equipped with E2M <sup>®</sup> >12.5 kg	○	○	○	○	○	○	-	-	-	-	-	-	-	-	○	○	○					

● - Standard ○ - Optional - - Not available

FACT SHEET TOOL HOLDERS												
New Standard Premium Clamping	New Standard HD Premium Clamping	New Standard Premium Crowning	New Standard HD Premium Crowning	New Standard Premium Bottom Tool Holder	New Standard HD Premium Bottom Tool Holder	New Standard Pro Clamping	New Standard Pro Crowning	New Standard HD Pro Crowning	New Standard Pro Bottom Tool Holder	New Standard HD Pro Bottom Tool Holder	American Style Clamping	

**Accuracy**

Working surface precision	+++	+++	+++	+++	+++	+++	++	++	++	++	++	++
Tx-alignment	●	●	●	●	●	●	●	●	●	●	●	●
Ty-alignment	-	-	●	○ (W = 158 mm)	○	○	○	●	○ (W = 158 mm)	○	○	○

**Durability**

High tensile CrMo steel alloy, $\geq 1000 \text{ N/mm}^2$	●	●	●	●	●	●	-	-	-	-	-	-
High quality tool steel, 600-720 N/mm <sup>2</sup>	-	-	-	-	-	-	●	●	●	●	●	-
Pressure surface CNC-Deephardened® to approx. 56°, HRC.	●	●	●	●	●	●	-	-	-	-	-	-
Max. load												
Head load	200 <sup>2</sup> /250 t/m	250 t/m	-	-	-	-	180 t/m	-	-	-	-	-
Shoulder load	200 <sup>2</sup> /300 t/m	800 t/m	300 t/m	800 t/m	200 <sup>2</sup> /300 t/m	800 t/m	250 t/m	200 t/m	500 t/m	200 t/m	500 t/m	230 t/m

**Flexibility**

Easy reversibility of tooling because of symmetrical adaption	●	●	●	●	●	●	●	●	●	●	●	●	
Hydraulic Clamping (max. 50 bar oil pressure, power pack available <sup>1)</sup> )	●	●	●	●	●	●	●	●	●	●	●	●	
Manual Clamping	○	-	○	-	○	-	○	○	○	○	○	○	
Pneumatic Clamping ( $\geq 7 \text{ bar}$ ) L = $\leq 4250 \text{ mm}$	○	-	-	-	○	-	○	○	-	○	-	-	
Individual Clamping of each tool segment, as of	Hydr./Pneum. Clamping	10 mm	40 mm	10 mm	40 mm	10 mm	40 mm	15 mm	15 mm	40 mm	15 mm	40 mm	15 mm
	Man. Clamping	20 mm	-	20 mm	-	20 mm	-	20 mm	20 mm	40 mm	20 mm	40 mm	20 mm
Designed for use on new press brakes equipped with UPB hole pattern <sup>1)</sup>	●	●	●	●	●	●	●	●	●	●	●	●	
Available for press brakes not equipped with UPB hole pattern	-	-	-	-	○	-	○	○	-	○	-	○	
ATC possible (Gripper, TIPS®)	○	-	○	-	○	-	-	-	-	-	-	-	
Smart Tool Locator®	○	○	○	○	-	○	○	○	○	○	○	○	
Vertical* + horizontal loading *Safety-Clicks® required with top tools	●	●	-	-	-	-	●	-	-	-	-	●	
Max tool weight (top tools: self seating)	Hydr. Clamping	300 kg/m	1000 kg/m				100 kg/m					75 kg/m	
	Man. Clamping	180 kg/m					180 kg/m						
	Pneum. Clamping	100 kg/m					70 kg/m						

**Speed**

Automatic clamping seating and aligning of the tooling	●	●	●	●	●	●	●	●	●	●	●	● <sup>4)</sup>
Fast tool changing	●	●	●	●	●	●	●	●	●	●	●	●
Equipped for E2M®	●	●	●	●	●	●	●	●	●	●	●	-
Crowning adjustment (Standard on the right side)	CNC	-	-	● <2500 kg	○ <4000 kg	-	-	● <2500 kg	X >4000 kg	-	-	-
	Hydr	-	-	● >2500 kg	○ >4000 kg	-	-	● >2500 kg	X >4000 kg	-	-	-
	H	-	-	● <1500 kg	-	-	-	● <1500 kg	-	-	-	-
	HF (L $\leq 4300 \text{ mm}$ )	-	-	≈75-100 kg/m	-	-	-	≈75-100 kg/m	-	-	-	-

**Safety**

Equipped for use of Safety-Clicks® up to 12,5 kg	●	●	-	-	-	-	●	-	-	-	-	●
Equipped for use of Safety-Pins > 12,5 kg	●	●	-	-	-	-	●	-	-	-	-	●
Clamping equipped with V-Lock®	-	-	●	●	●	●	-	●	-	●	-	-
Pillars for supporting wide bottom tools	-	-	-	○	-	○	-	-	○	-	○	-

**Guards**

Hardened steel	●	●	●	●	●	●	-	-	-	-	-	-
Plastic	-	-	-	-	-	-	●	●	●	●	●	●
E2M® with roll-out safety device (Hardened steel)	○	●	○	●	○	●	○	○	●	○	●	-

● - Standard ○ - Optional - - Not available <sup>1)</sup> Various UPB hole patterns are used, for more information please contact WILA. <sup>2)</sup> Pneumatic Clamping. <sup>3)</sup> See page 103. <sup>4)</sup> Hydraulic Clamping.

<b>NSCL-I</b> New Standard Pro Clamping non-hardened version	<b>NSCR-I</b> New Standard Pro Crowning non-hardened version	<b>HC</b> Hydraulic Clamping. Used in Clamping, Crowning and Bottom Tool Holders
<b>ASCL-I</b> American Style Clamping non-hardened version	<b>OB-I</b> New Standard Pro Bottom Tool Holder non-hardened version	<b>MC</b> Mechanical Clamping. Used in Clamping, Crowning and Bottom Tool Holders
<b>NSCL-II</b> New Standard Premium Clamping hardened version	<b>NSCR-II</b> New Standard Premium Crowning hardened version	<b>HD</b> Heavy Duty
	<b>OB-II</b> New Standard Premium Bottom Tool Holder hardened version	<b>SL</b> Pneumatic Clamping. Used in Clamping, Crowning and Bottom Tool Holders