



# Roller Guide for flat and profiles **PRD-PRG-WEG-CSG**

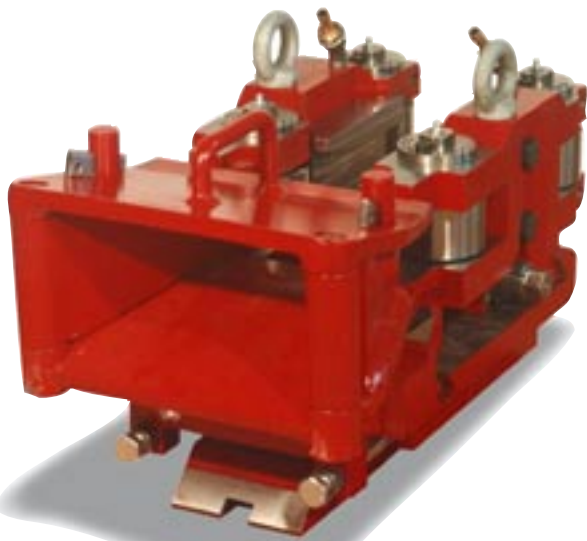
## Roller guides for flats and profiles

For the particular demands for guiding of flat and profiled sections Morgårdshammar can provide our customers with a complete line of roller guides. The design of our line of roller guides is based on our long experience in the field of guiding of profiles and roller guides in general. It means that they are designed with focus on strength and precision and in a user-friendly environment.

The line of roller guides is divided into different groups with their own designation. The groups are:

- PRD - The PRD guide is designed to be used for flat section and all other different types of sections. It can even, as an alternative to the PRG type of guide, be used in the last two stands when rolling profiles.
- F - Used for the same situations as the PRD type but with a lower front roller for closer positioning to the stand.
- PRG - Roller guide for profiles such as equal and unequal angles, channels and beams. The PRG type of guide is mainly used in the finishing and pre-finishing stands. The design with two bottom rollers and one top roller is an advantage for precise guiding into the grooves of the stand roll.
- WEG - This type is an exit roller guide used for edging of flats, squares and hexagons. It can preferably be used where a accurate tolerance of the width of the material is important.





- CSG - The CSG roller guide is used for straightening of channels exiting out of the last mill stand.

Except for the above mentioned roller guide types Morgårdshammar can also provide our customers with guides for special applications. Morgårdshammar have as an example delivered exit twist guides for beams when using diagonal pass design. Another example is an edging guide for beams used for controlling the length of the legs. Morgårdshammar can of course also fulfil all needs for static entry and exit guide applications as well. Please contact our representatives or us directly for detailed information about any special needs.

All of the different guide types are suitable to be lubricated by air-oil or grease depending of availability. The connection is positioned for easy access on the guide body.

In order to maintain the rollers and increase the lifetime of the same an efficient cooling is required. All Morgårdshammar roller guides for flats and profiles have integrated cooling of rollers. The water connection is placed on top of the guide or on at the back depending of type. It is then transported internally into the most efficient position in order to spray onto the rollers.

The capability of section dimensions on the following pages must be seen as recommendations. Please present your actual data by using the inquiry sheets in the end of the brochure and we will be pleased to assist and confirm.



## Flat and profile roller guide, PRD

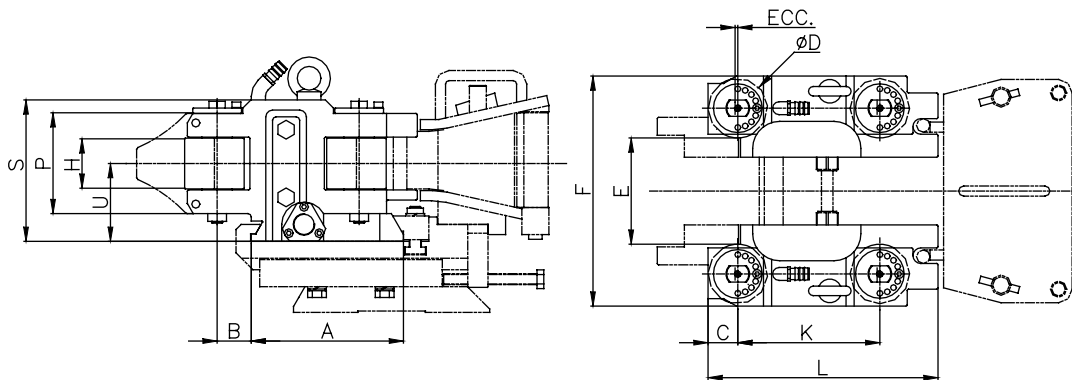
The PRD type of guide is a 4-roller entry guide used in positions where an accurate entry of the flat section is important. The four rollers guide the material straight into the stand that result into a high quality final product. Another major advantage for using this type of guide is the prevention of scratches on the rolled material.

The distance between the rollers is set by one central screw adjustment. When the distance is set the sides of the entry funnel follows automatically. The guide is provided with inner wear plates and nose pieces, easily exchangeable, which increase the guiding in open passes and in addition protect the guide housing for eventual wear.

The base of the guide is made according to each specific arrangement in respect of width.



Type	PRD 01	PRD 02	PRD 03
Flat	20-140x4-40	50-180x6-50	75-280x10-90
Angles	15-80	45-100	70-260
Channels	20-60	50-100	75-200

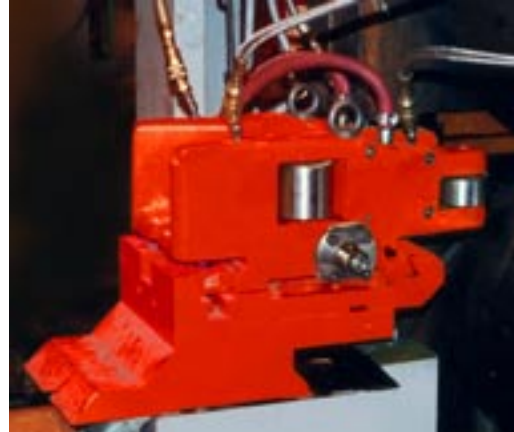


Type	A	B	C	D max	E min	F	H	K	L	P	S	U	ECC.
PRD 01	225	40	37,5	80	20	E+167	45	200	322,5	115	175	100	3,5
PRD 02	225	50,5	44	88	50	E+183	75	210	340	148	210	115	4
PRD 03	250	57	44	88	75	E+183	110	240	370	197,5	251,5	140	4

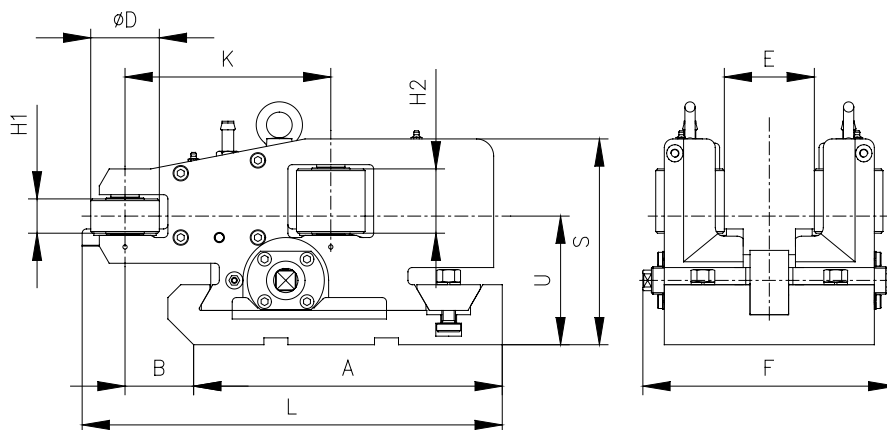
All dimensions are in mm

## Flat and profile roller guide, F

This line of guides represents the similar features as the later developed PRD guides. The most significant difference is the different height of the two pair of rollers.



Type	F 60	F 100	F 200	F 240
Flat	45-65x4-40	45-105x6-30	80-205x6-40	120-245x6-20
Angles	35-45	35-70	60-140	90-150
Channels	50-60	50-100	80-200	120-240



Type	A	B	D max	E max	E min	F	H1	H2	K	L	S	U
F 60	360	100	100	65	45	295	60	95	280	520	260	160
F 100	360	80	80	105	45	295	40	75	240	490	240	150
F 200	360	100	100	205	80	435	60	95	280	520	260	160
F 240	360	80	80	245	45	435	40	75	240	490	240	150

All dimensions are in mm

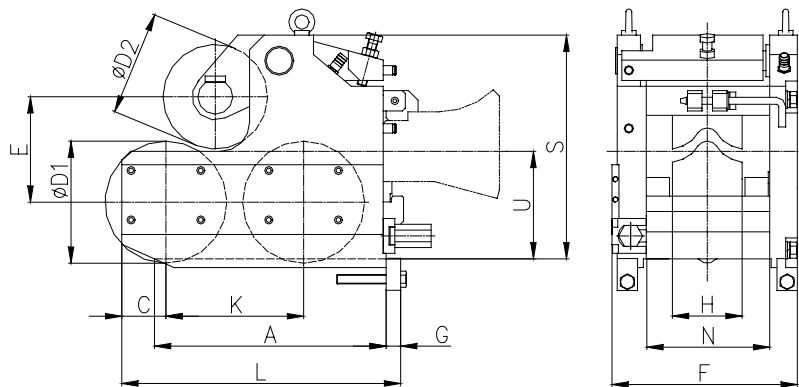
## Profile Roller Guide, PRG

The latest generation of profile roller guide has been designed in a compact design, without losing strength, and is equipped with simultaneous setting of the two lower pair of rollers. The third roller, top, is set by means of a screw easy accessible on top of the guide. Our guides are equipped with the possibility for axial adjustment of the top roller. This possibility is an advantage for accurate positioning of the roller with reference to the bottom rollers and is a must when rolling asymmetrical sections such as unequal angles.



As shown on the picture to the right the complete side is removable for quick and reliable change of rollers.

Type	PRG 06	PRG 09	PRG 12
Eq. Angle	25-60	45-90	75-120
Uneq. Angle	30-60	50-90	80-120
Channel	30-60	50-90	80-120



Type	A	C	D1 max	D2 max	E max	F	G	H	K	L	N	S	U
PRG 06	244	49,5	130	120	114,5	198	25	65	150,5	325	112,5	255,5	135
PRG 09	317	55	160	150	146	251	25	85	190	400	157,5	315	150
PRG 12	400	71	210	180	181,5	319	25	120	237	475	212,5	385	185

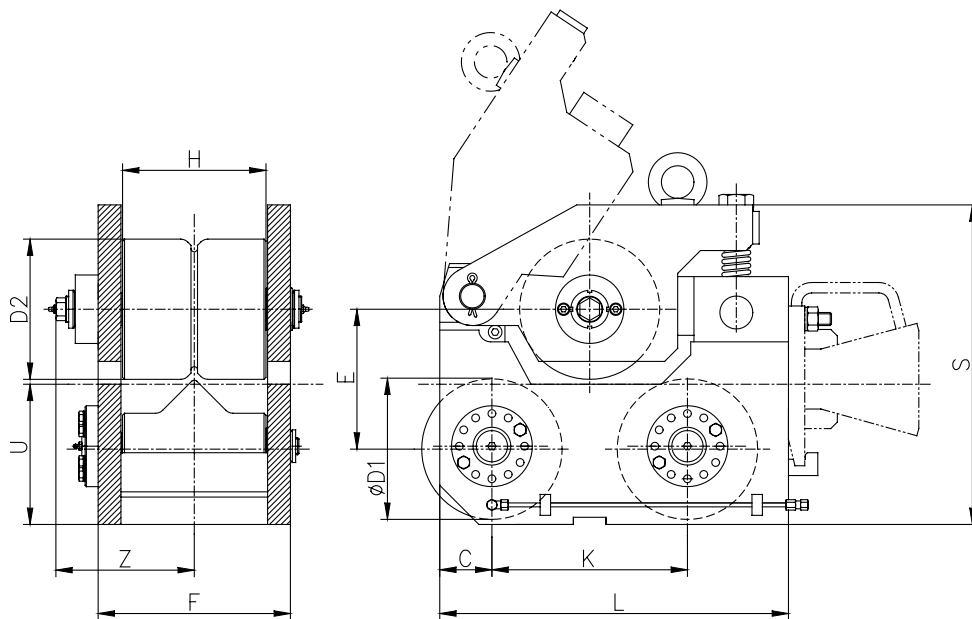
All dimensions are in mm

## Profile Roller Guide, PRG

Our former generation of profile roller guides have a simplified design for the setting of the bottom pair rollers. They are individually set and locked. The design of the top roller position is in principal the same as for the later generation by means of a screw at the top of the guide.

The latest upgrading of the design of these guides have been the possibility of axial adjustment of the top roller. This operation is easily executed only by rotating the roller shaft.

The section of the rolled material decides the size of guide needed.

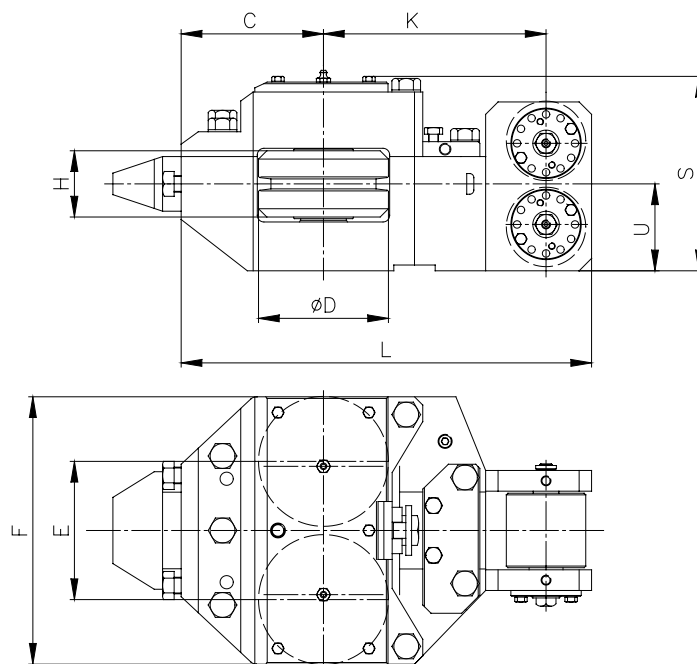


Type	C	D1 max	D2 max	E max	F	H	K	L	S	U	Z
PRG 50	55	110	110	112	105	50	150	300	280	115	92
PRG 80	50	140	115	125	133	80	180	330	310	140	115,5
PRG 120	50	140	115	125	173	120	180	330	310	140	135,5
PRG 160	80	220	220	220	235	160	300	535	490	215	182
PRG 200	80	220	220	220	275	200	300	535	490	215	202
PRG 220	80	225	215	220	295	220	300	535	490	215	212

All dimensions are in mm

## Working Edging Guide, WEG

The Morgårdshammar working edging guide, WEG, is designed with the typical Morgårdshammar features, such as single point adjustment of roller distance and rigid design. This line of guides is designed for "sizing" the width of the rolled section, mainly flats and squares. It is placed on the delivery side of the stand. The guide can preferably be used to control the width of the incoming flat section before the forming pass when slit rolling. Lubrication, grease or air/oil, of bearings is easily accessible on the shaft ends.



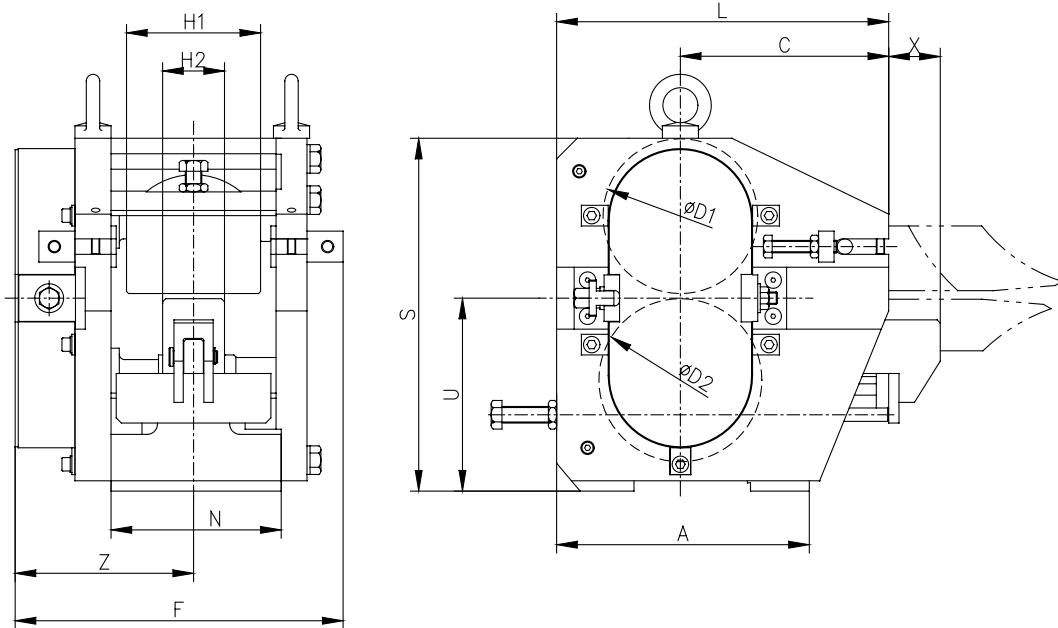
Type	C	D max	E max	E min	F	H	K	L	S	U	Max Section
WEG30	130	103	108	92	215	60	205	390	193,5	90	30x15
WEG50	172	157	167	143	323	80	269	496	235	105	50x25
WEG70	215	198	212	188	417	105	350	620	312	135	70x35

All dimensions are in mm

# Channel Straightening Guide, CSG

Morgårdshammar have developed a guide for straightening of channels, CSG. The main purpose of this guide is to increase the number of redressing of the roll in the last mill stand. The simple solution is to design the last groove with non parallel legs and a bent web. The CSG guide, positioned on the exit of the last stand, "bent" it back before the cooling on the cooling bed. This guide is available in five different sizes 05, 10, 15, 20 and 25 as standard. The different numbers indicates the maximum size of channel possible.

The CSG guides are users friendly with single point adjustment of the rollers and easy access when changing rollers while the complete side is then dismantled. The strippers are easy to adjust into a position for accurate "stripping" of the material.



Type	A	C	D1 <sub>max</sub>	D2 <sub>max</sub>	F	H1 <sub>max</sub>	H2 <sub>max</sub>	L	N	S	U	X <sub>max</sub>	X <sub>min</sub>	Z
CSG05	245	202	155	175	231	64	64	322	113	342	187	77	44	127*
CSG10	245	202	155	175	318	130	60	322	165	342	187	77	44	173
CSG15	280	260	170	240	375	180	95	415	215	405	223	71	30	205
CSG20	320	360	190	240	410	230	140	535	265	432	250	-	-	240
CSG25	320	430	190	280	503	290	180	605	325	465	290	-	-	270

All dimensions are in mm

\*) On CSG05 the gearing can be mounted on opposite side.



**SHAPE, DIMENSIONS OF BAR TO BE GUIDED:**

Stand	Fig.	W	H	S	T	R

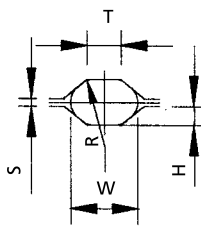


FIGURE A

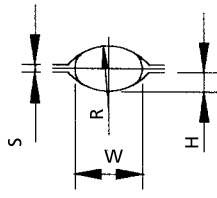


FIGURE B

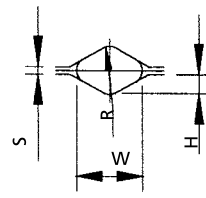


FIGURE C

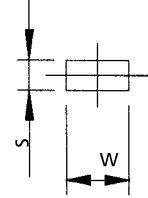
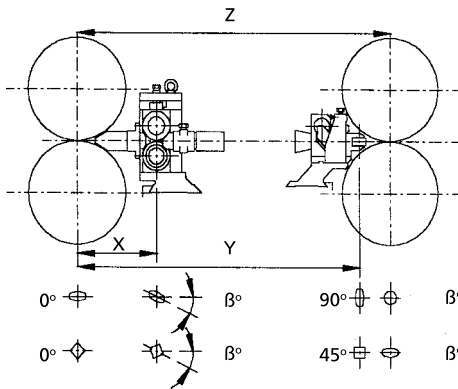


FIGURE D

**STAND INFORMATION FOR TWIST GUIDE:**



X = MH selection

Y = \_\_\_\_\_

Z = \_\_\_\_\_

Notes: \_\_\_\_\_

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