

# Pre-roller stand

new product

Safer die changing



**Pascal**

## Pre-roller stand model **PRM** PAT.

6,000kN (600ton) Press machine Die 2ton One operator



 **movie** Video introduction

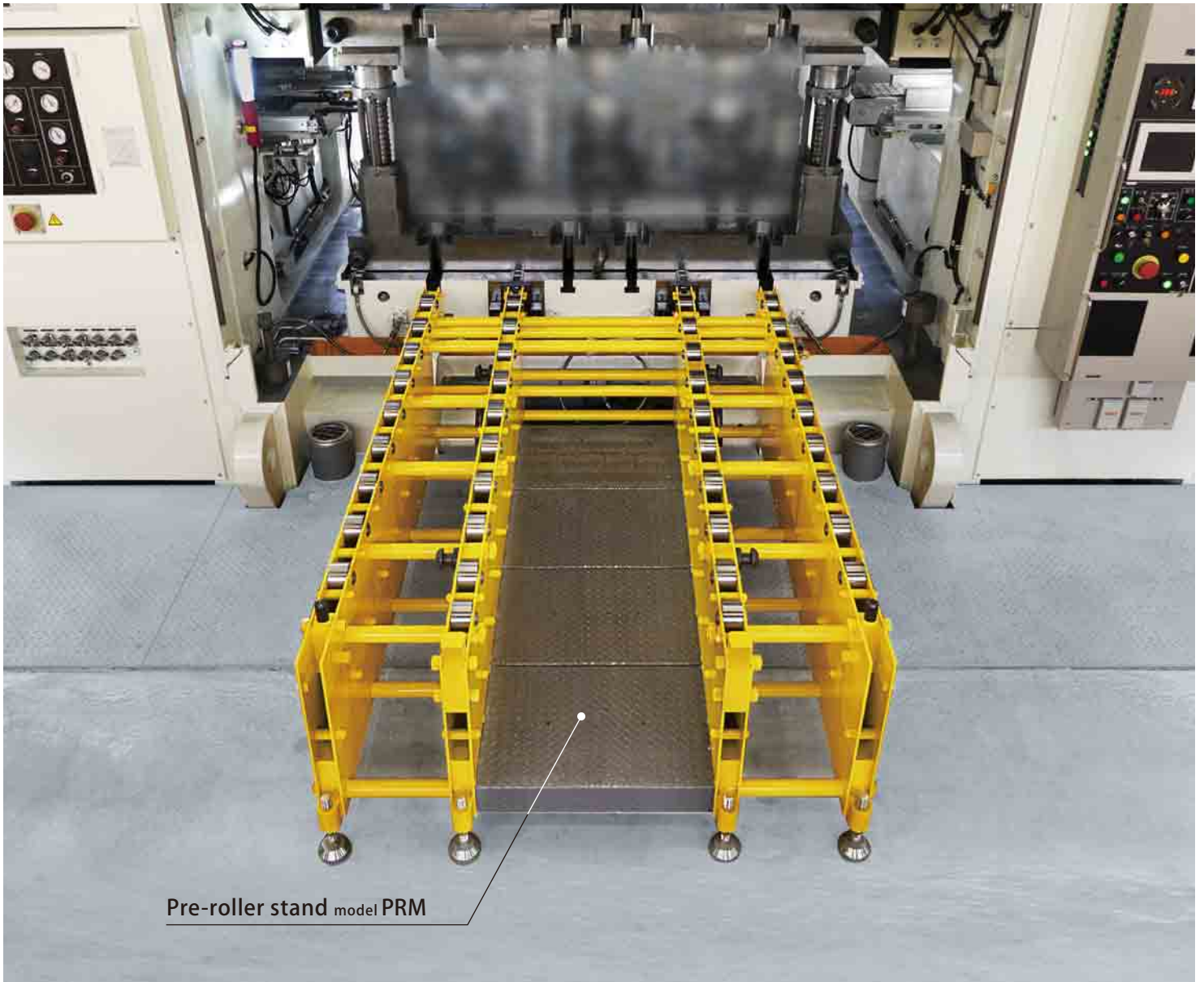
We are delivering videos on the Internet.



6,000kN press machine 2ton  
The loding/unloaidng of die

## Pre-roller stand model PRM PAT.

20,000kN (2,000ton) Press machine Die 8ton One operator



20,000kN press machine 8ton  
The loding/unloaidng of die



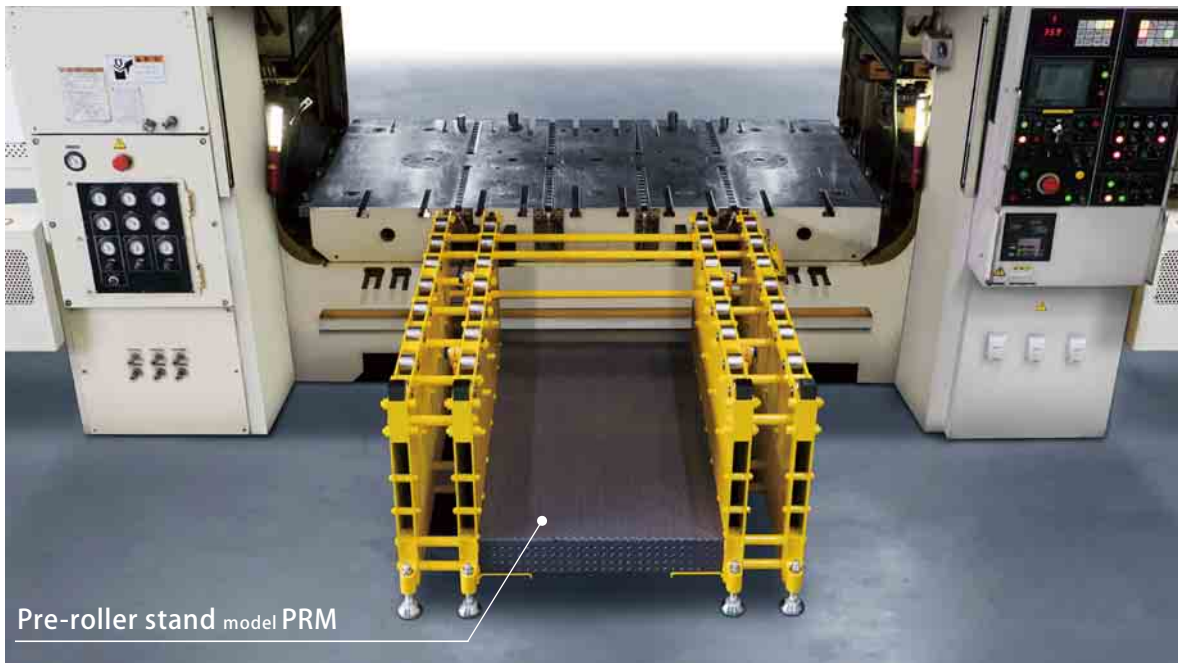


## Pre-roller stand model **PRM** PAT.

It has more excellent rigidity compared with pre-roller and there is very little displacement under the load so that the loading/unloading the die can be smoothly performed.



6,000 kN press machine 2-rows model

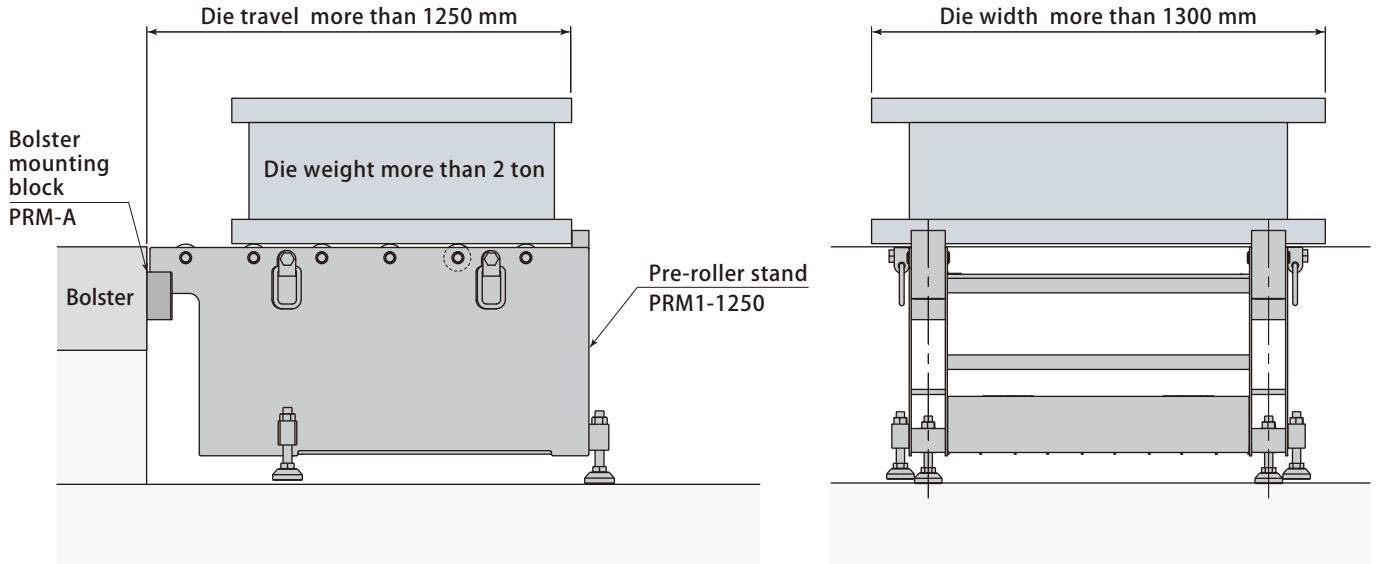


12,000 kN press machine 4-rows model

It can be carried in front of the machine and be easily mount/dismount by using an overhead crane, a forklift and a handlifter thereby 1 set of pre-roller stand is applicable for multiple press machines.

## Selection Criteria

In case the die weight is over 2ton, die width is over 1300mm and die travel is over 1250mm, pre-roller stand is recommendable.



## Introduction effect (In case the die weight is 8ton)

Conventional **Pre-roller (PRC)**

Die change : 180 min.

Operators : 3 persons

new **Pre-rollerstand**

Die change : 45 min.

Operators : 2 persons



In case the die weight is 5 ton

Pre-roller (PRC5-1600×2)  
Die change 30min 3 operators

Pre-roller stand (PRM1-2000 2rows)  
Die change 10min one operator

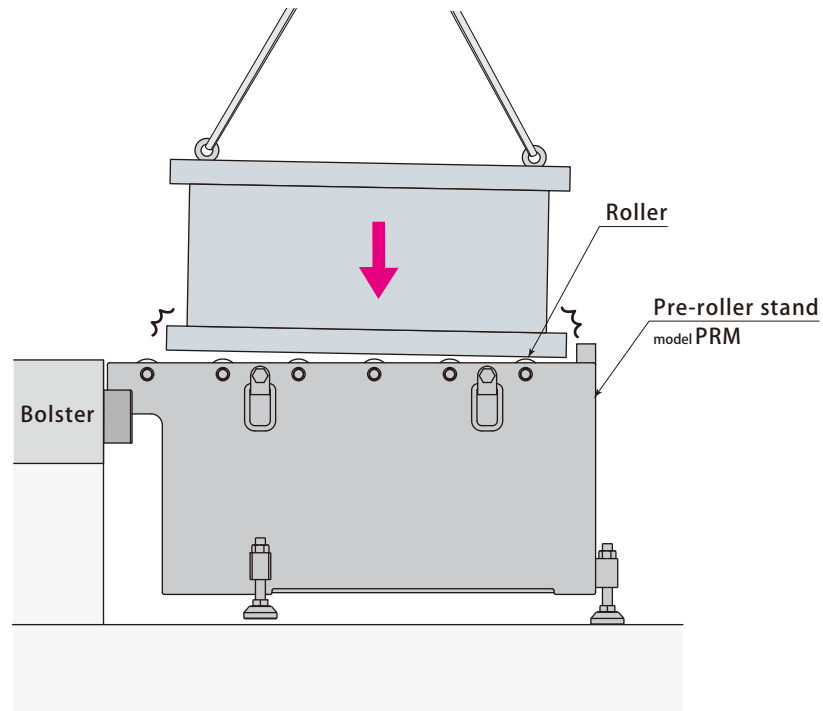
In case the die weight is 6 ton

Pre-roller (PRC5-1000×2)  
Die change 60min  
3 operators and a forklift 1machine

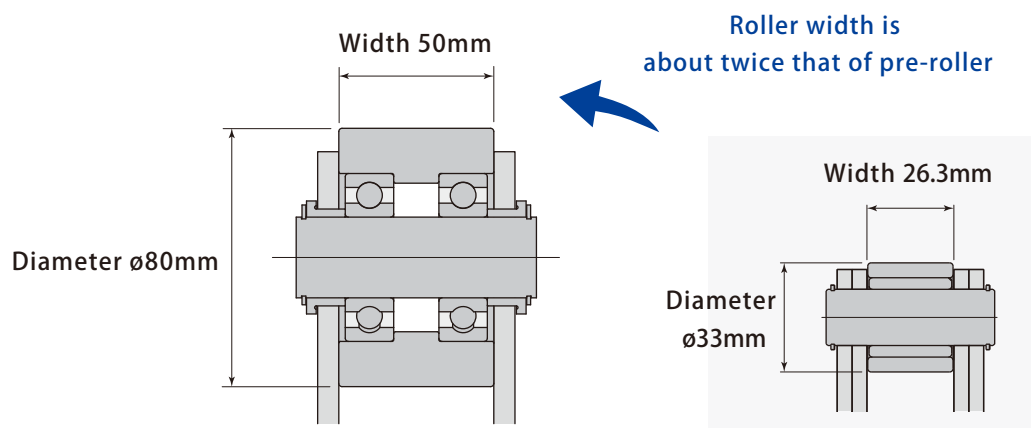
Pre-roller stand (PRM1-1600 4rows)  
Die change 20min 2 operators

Rollers are hardly damaged when placing a die and smooth loading of die is maintainable for a long period as the durability has been enhanced by strong structures.

By introducing a rigid structure with durable rollers and more resistant to impact when placing a die, smooth die transfer is maintainable for long period of time.



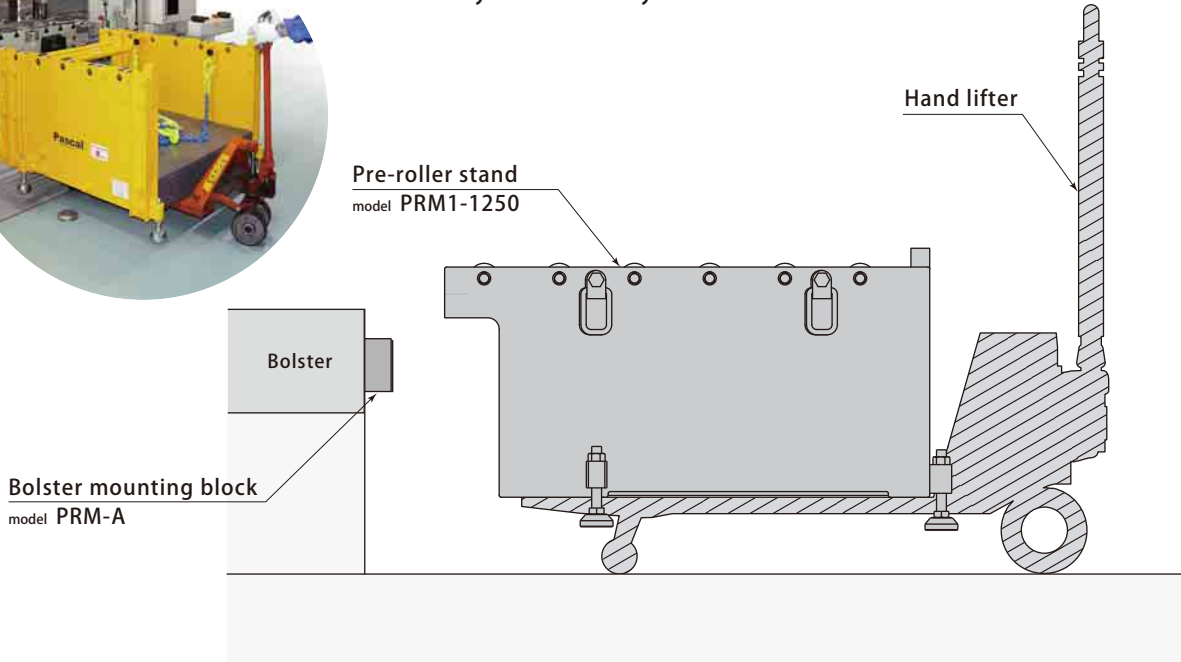
Larger diameter of rollers are adopted to load/unload a die smoothly.



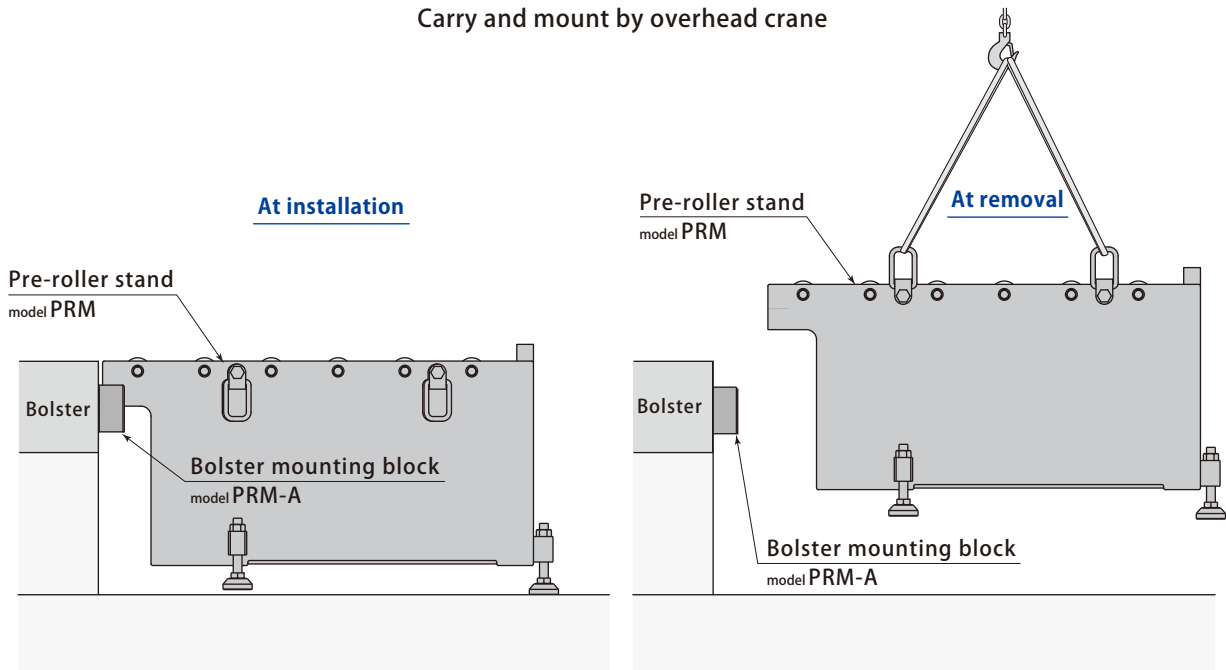
Easy to carry and mount. It takes less time to install and remove.



Die travel : less than 1250mm  
Carry and mount by hand lifter



Die travel : 1600mm, 2000mm  
Carry and mount by overhead crane

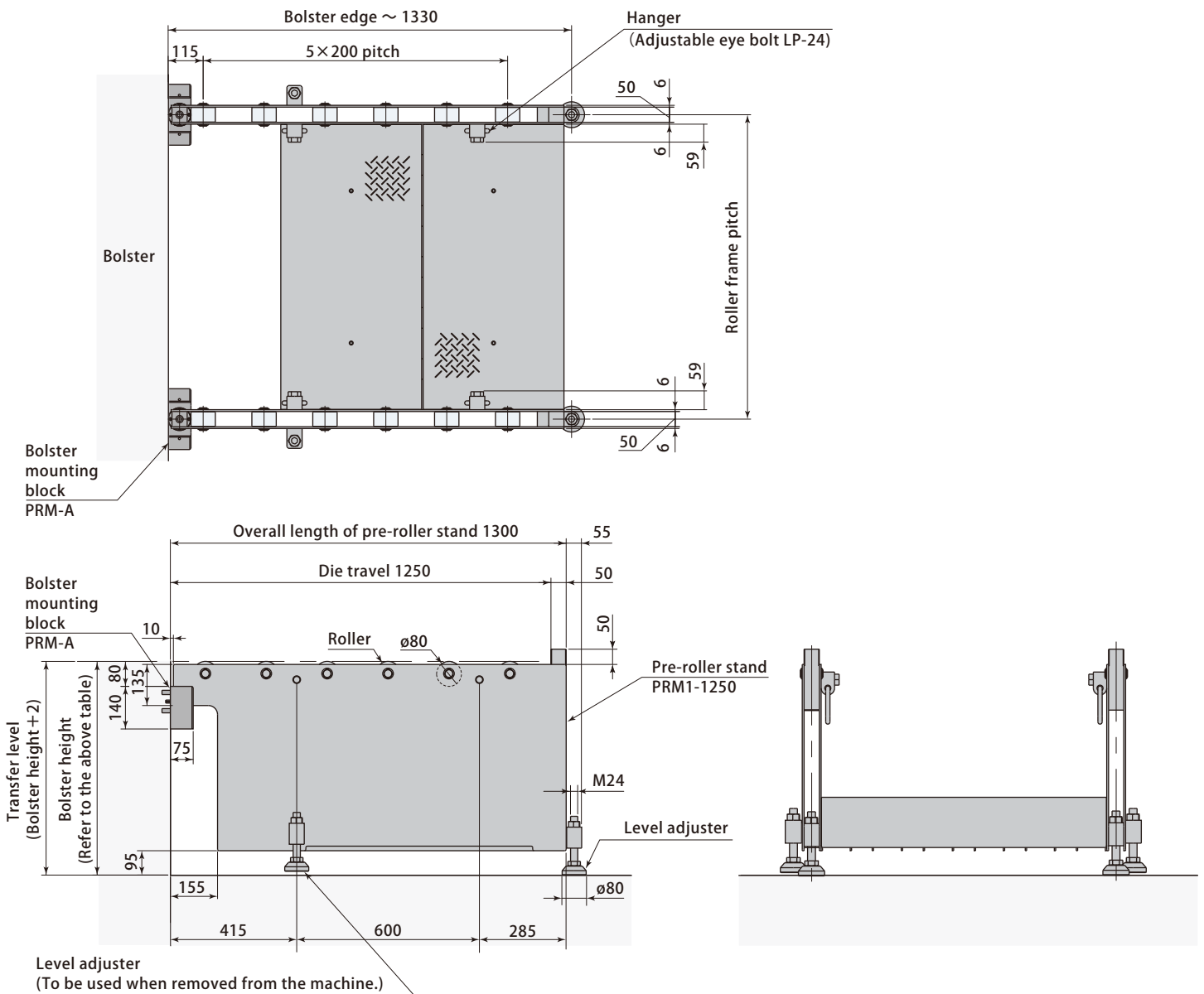


PRM 1 - 1250

- 1 Number of roller frames  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm)  
\* Indicated in 4 digits

Model		PRM1-1250
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	1250
Overall length of pre-roller stand	mm	1300
Mass *1	kg	430
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		12
Bolster height	mm	500 ~ 1300

\* 1 Roller frame pitch for 1000mm, Bolster height 700mm. The mass of the bolster mounting block is not included.



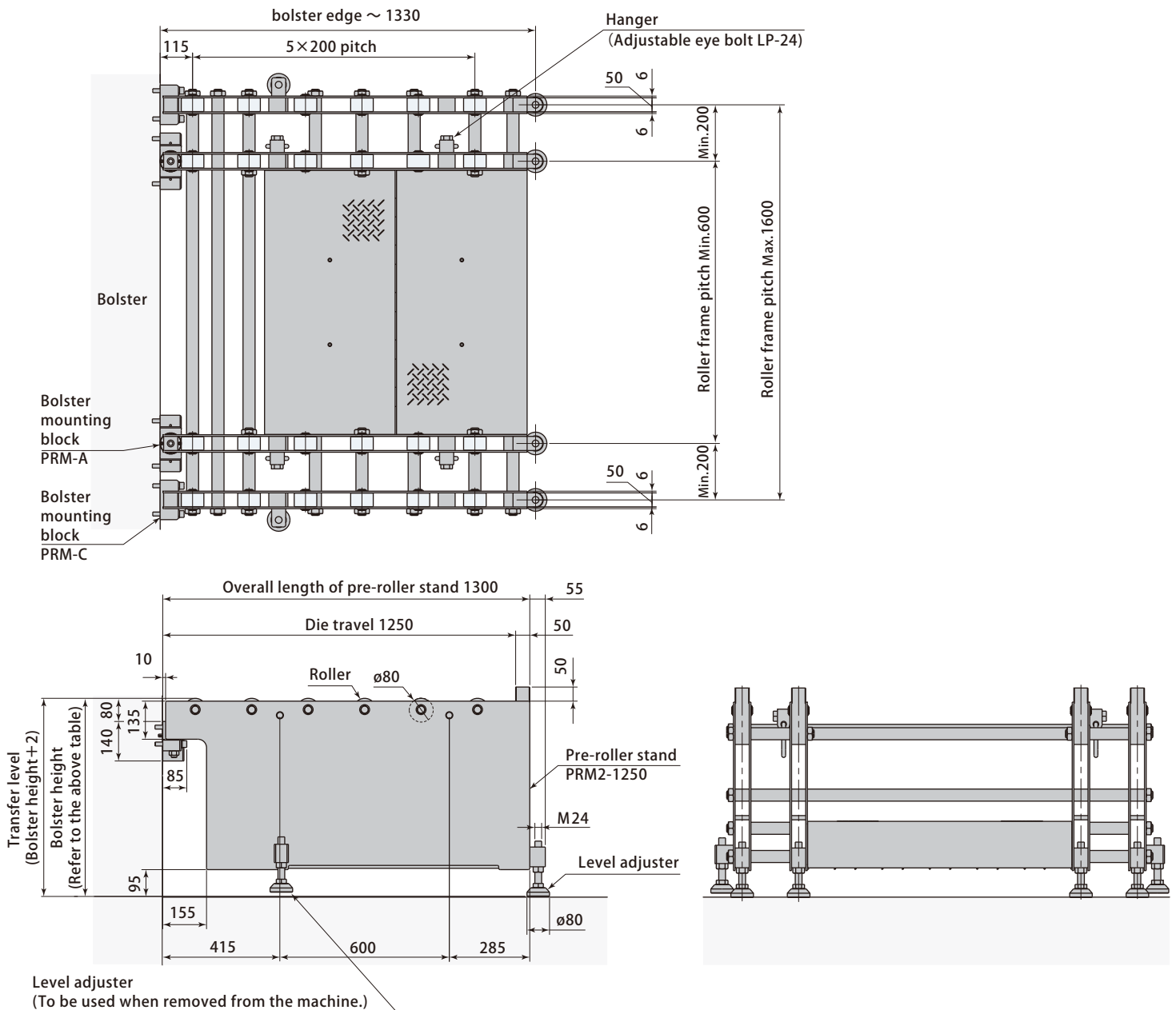


PRM 2 - 1250

- 1 Number of roller frames  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm)  
\* Indicated in 4 digits

Model		PRM2-1250
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	1250
Overall length of pre-roller stand	mm	1300
Mass *1	kg	640
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		24
Bolster height	mm	500 ~ 1300

\*1 Roller frame pitch for 1000mm,1400mm,Bolster height 700mm. The mass of the bolster mounting block is not included.

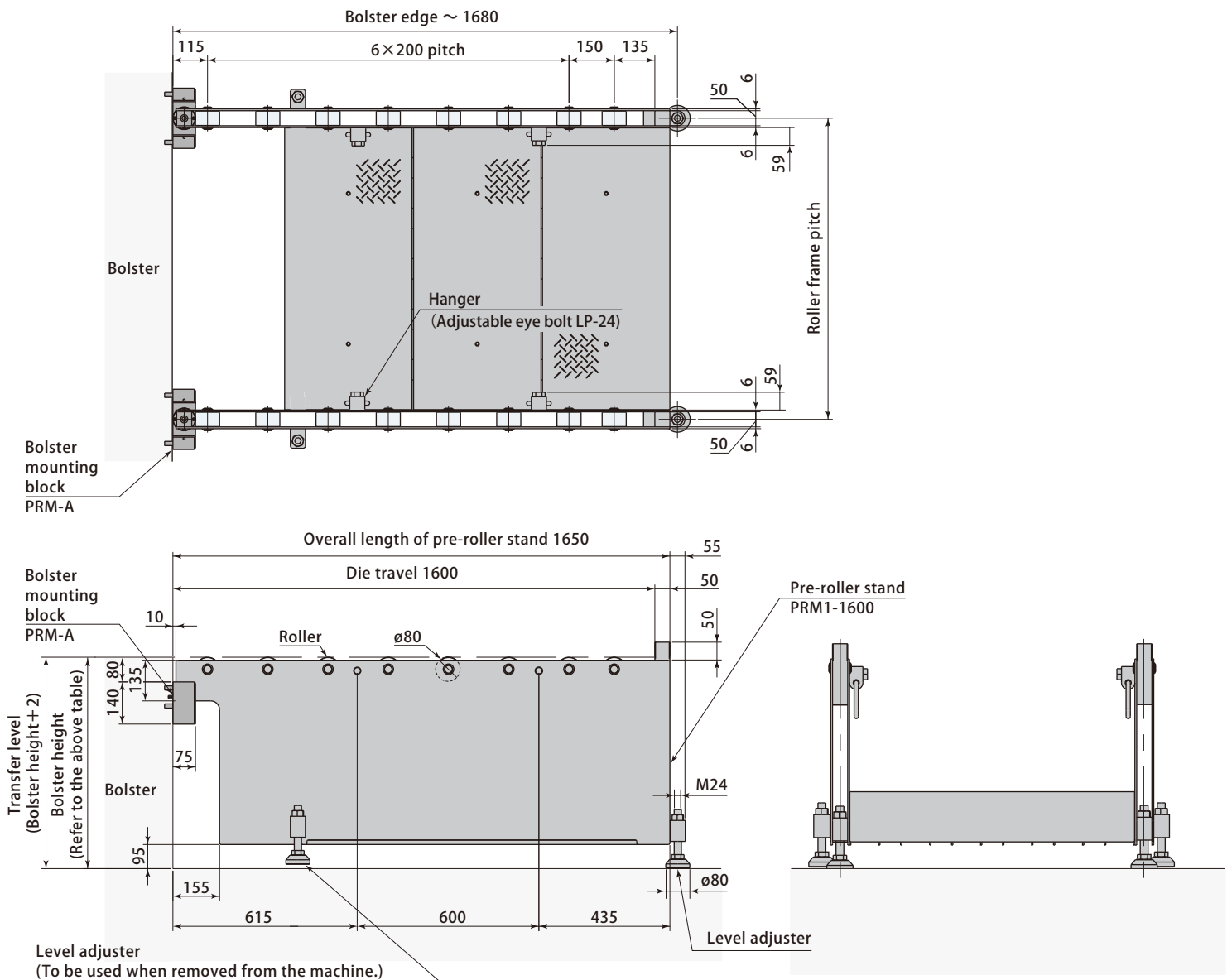


PRM 1 - 1600

- 1 Number of roller frames •.....  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm) •.....  
\* Indicated in 4 digits

Model		PRM1-1600
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	1600
Overall length of pre-roller stand	mm	1650
Mass *1	kg	520
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		16
Bolster height	mm	500 ~ 1300

\* 1 Roller frame pitch for 1000mm, Bolster height 700mm. The mass of the bolster mounting block is not included.

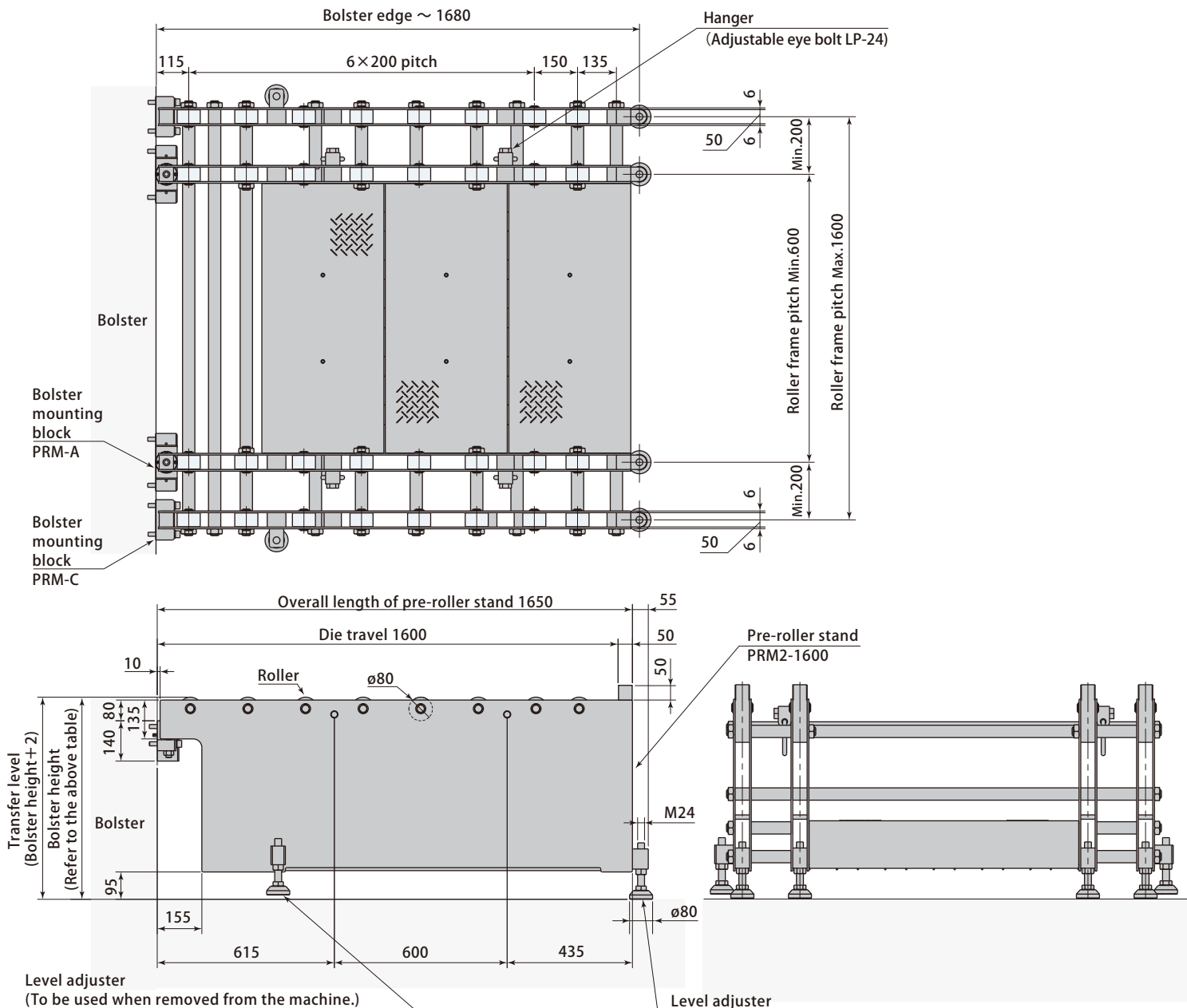


PRM 2 - 1600

- 1 Number of roller frames ●.....  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm) ●.....  
\* Indicated in 4 digits

Model	PRM2-1600	
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	1600
Overall length of pre-roller stand	mm	1650
Mass *1	kg	770
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		32
Bolster height	mm	500 ~ 1300

\* 1 Roller frame pitch for 1000mm,1400mm,Bolster height 700mm. The mass of the bolster mounting block is not included.

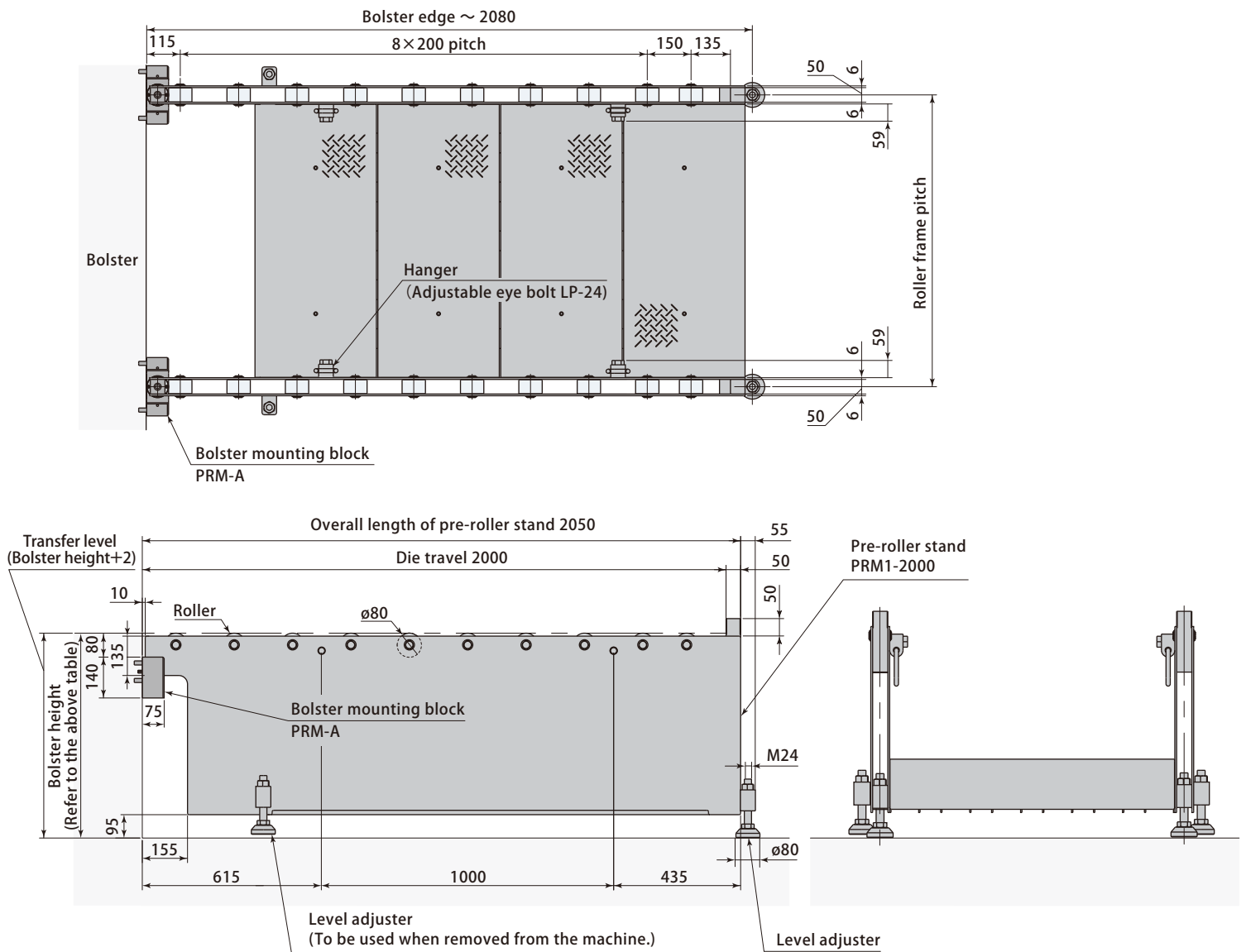


PRM 1 - 2000

- 1 Number of roller frames  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm)  
\* Indicated in 4 digits

Model		PRM1-2000
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	2000
Overall length of pre-roller stand	mm	2050
Mass *1	kg	680
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		20
Bolster height	mm	500 ~ 1300

\* 1 Roller frame pitch for 1000mm, Bolster height 700mm. The mass of the bolster mounting block is not included.

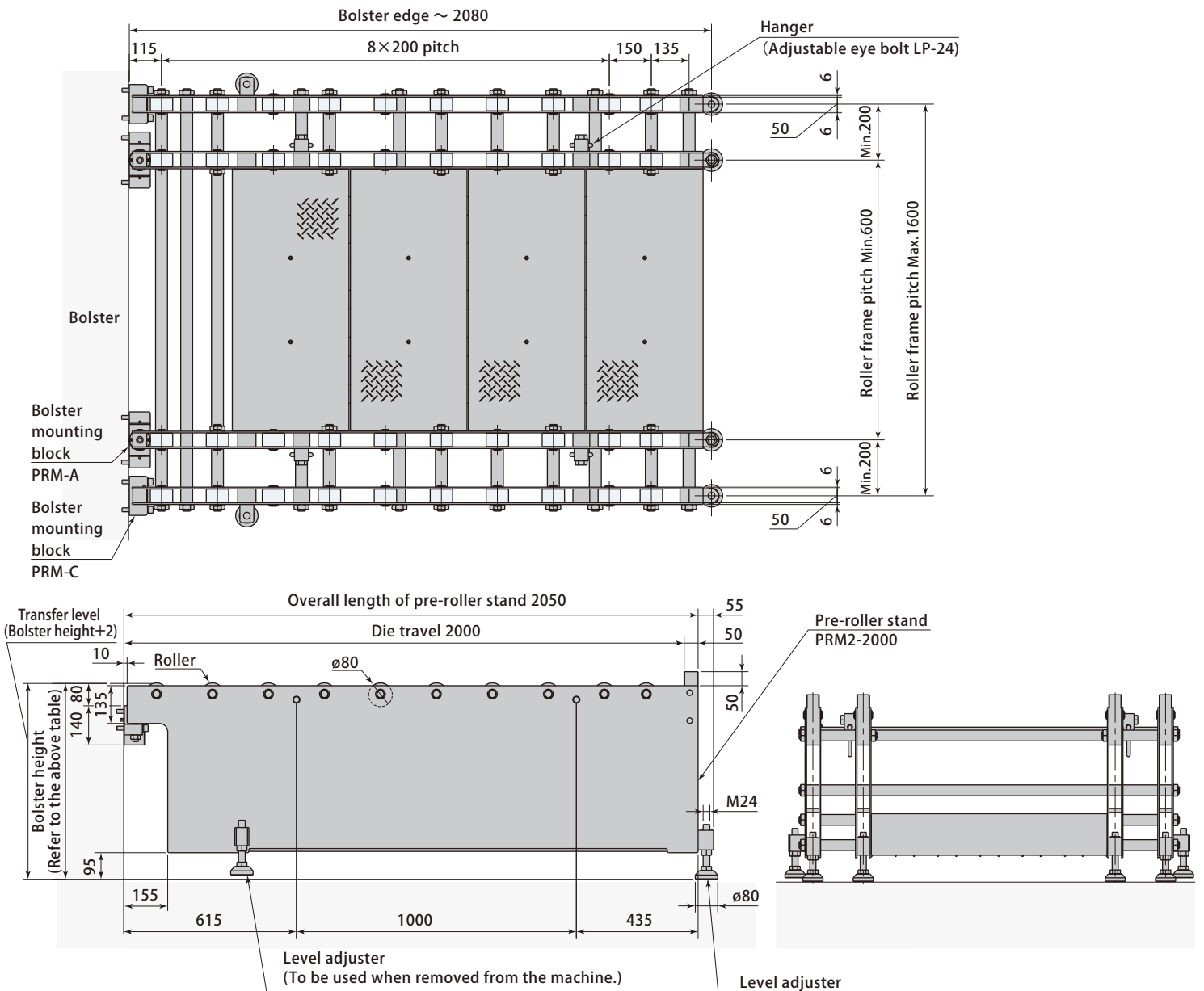


PRM 2 - 2000

- 1 Number of roller frames  
PRM1 : 2-rows PRM2 : 4-rows
- 2 Die travel (mm)  
\* Indicated in 4 digits

Model		PRM2-2000
Roller frame pitch	mm	600 ~ 1600
Die travel	mm	2000
Overall length of pre-roller stand	mm	2050
Mass *1	kg	940
Max. allowable load	kN(ton)	80(8)
Quantity of rollers		40
Bolster height	mm	500 ~ 1300

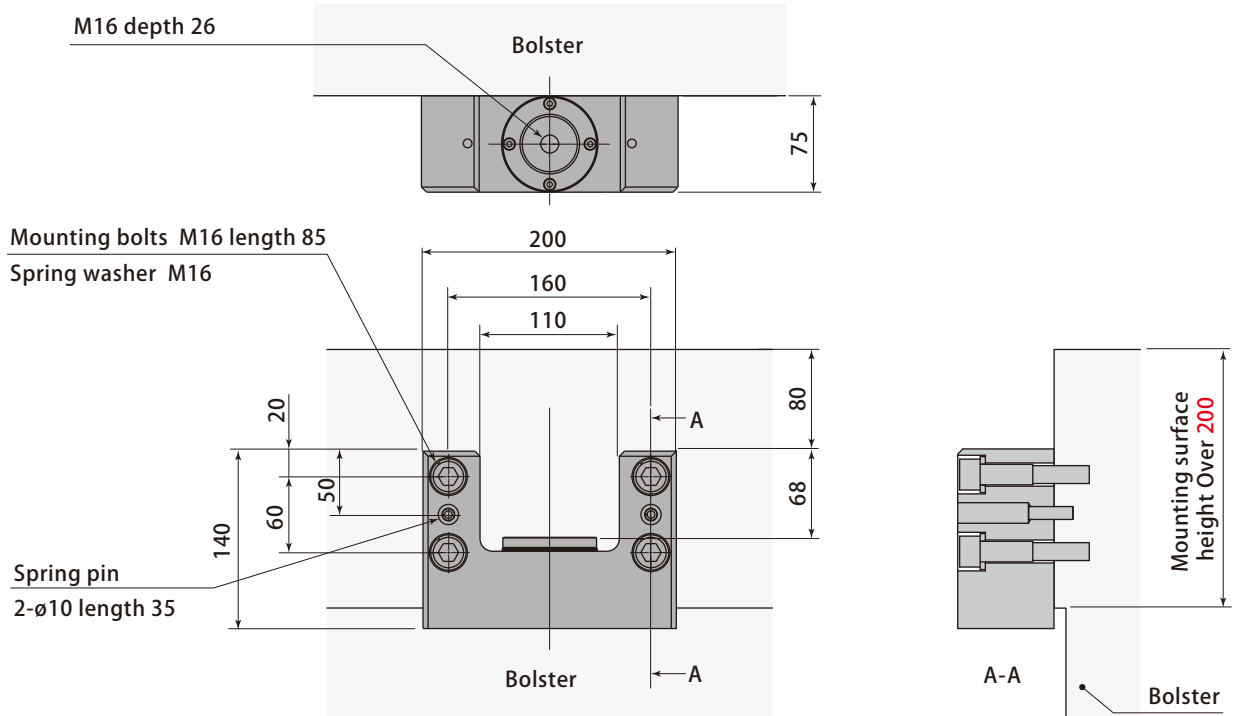
\* 1 Roller frame pitch for 1000mm,1400mm,Bolster height 700mm. The mass of the bolster mounting block is not included.





**Bolster mounting block**

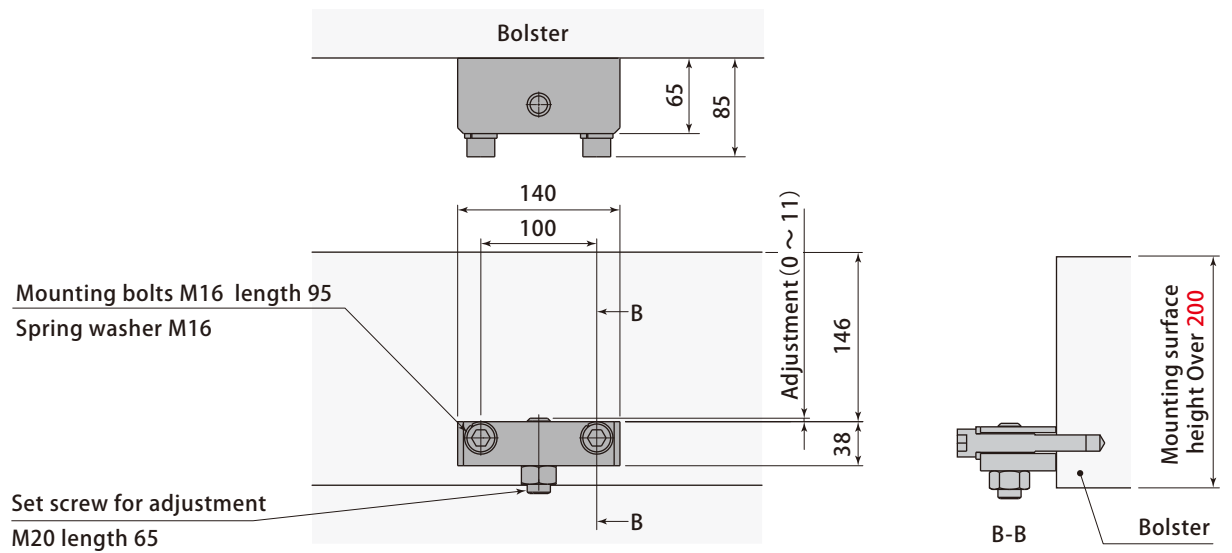
**PRM-A**



**Bolster mounting block**

**PRM-C**

For 4 rows (With PRM-A)

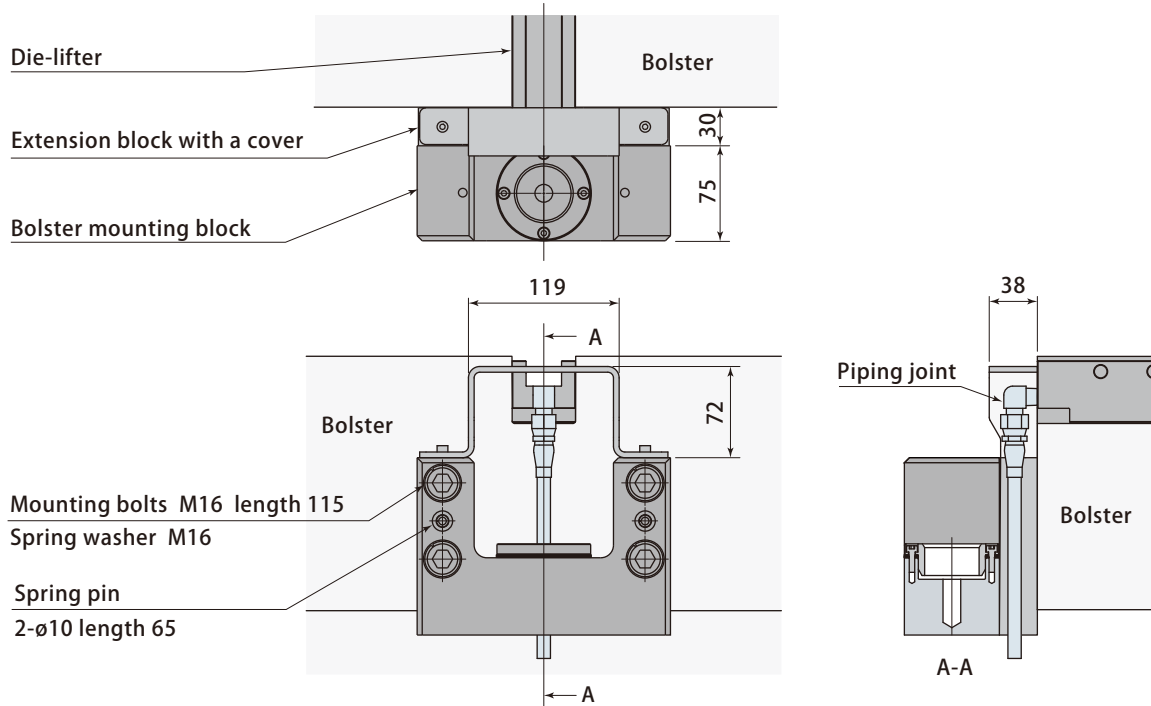


Model	PRM-A	PRM-C
Mass	13	3
Mounting bolts	4-M16 length 85	2-M16 length 95
Spring pin	2- $\phi$ 10 length 35	-
Set screw for adjustment	-	1-M20 length 65

Use this block when Die lifter piping runs block mounting area

Bolster mounting block with piping pocket

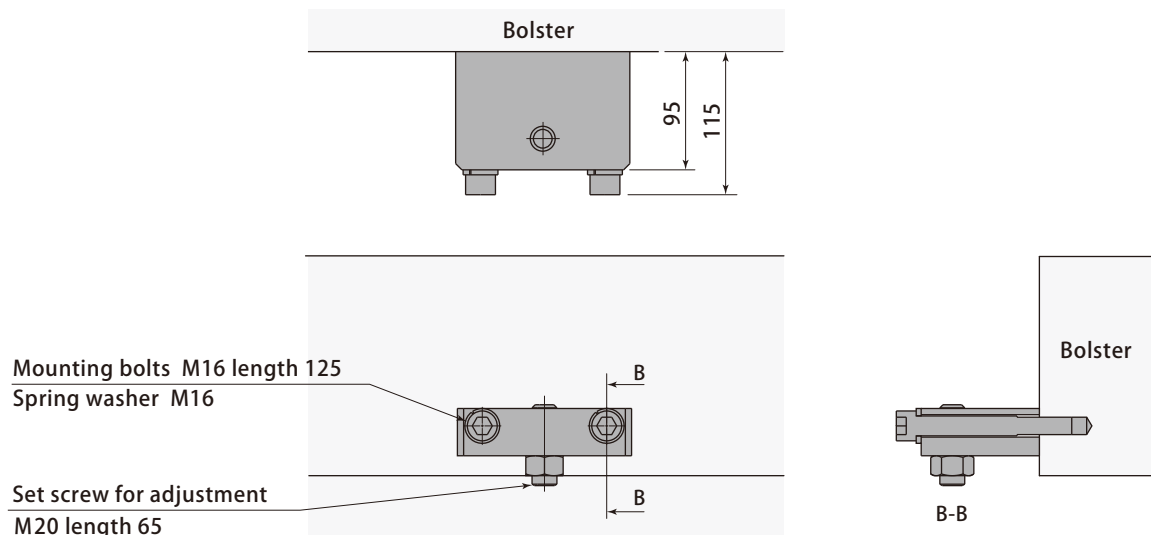
**PRM-A-30**



Bolster mounting block with piping pocket

**PRM-C-30**

For 4 rows (With PRM-A)

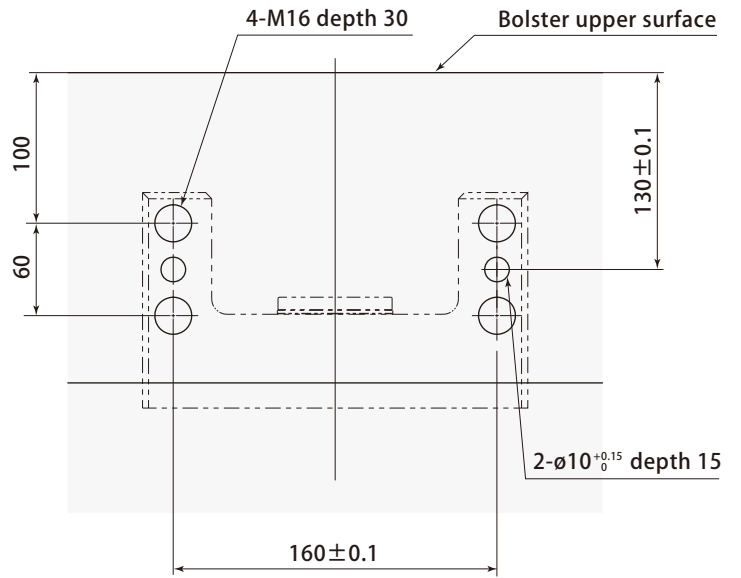
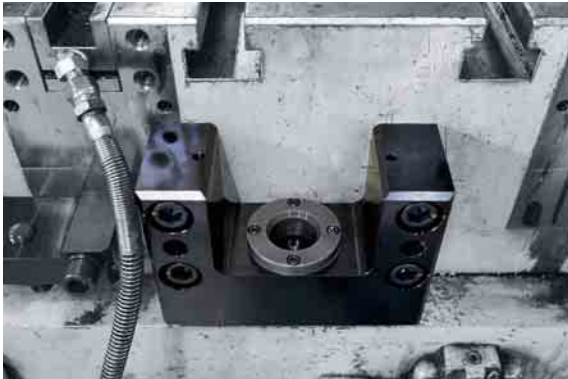


\* Refer to PRM-A, PRM-C diagram for other dimensions which are not shown.

Model	PRM-A-30	PRM-C-30
Mass	15.6	4.2
Mounting bolts	4-M16 length 115	2-M16 length 125
Spring pin	2-ø10 length 65	-
Set screw for adjustment	-	1-M20 length 65

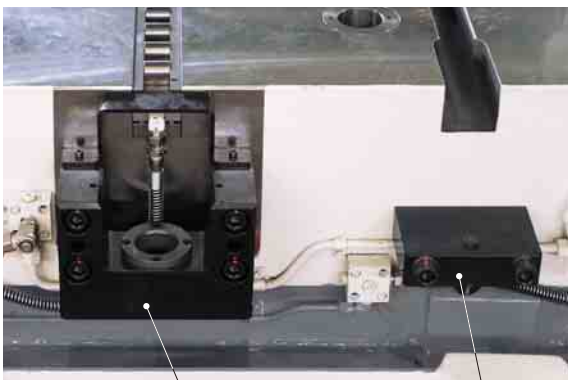
Mounting Details

Bolster mounting block  
**PRM-A / PRM-A-30**



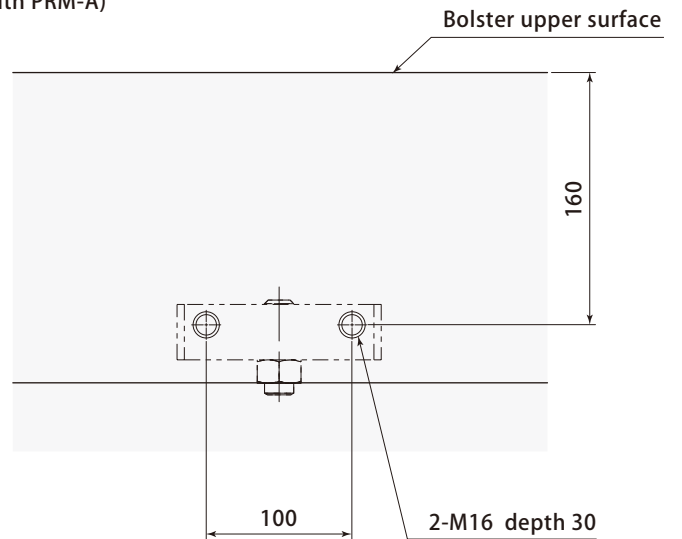
Bolster mounting block  
**PRM-C / PRM-C-30**

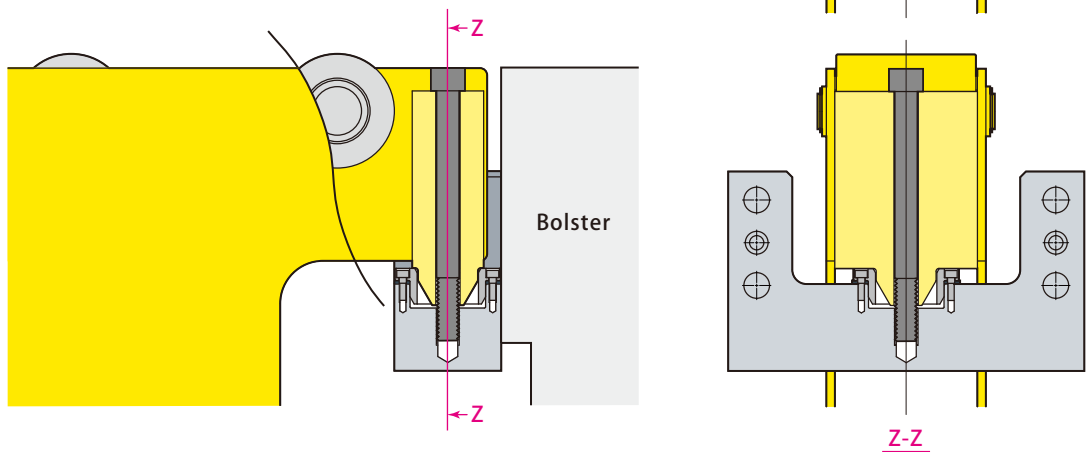
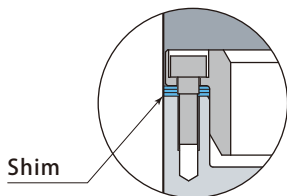
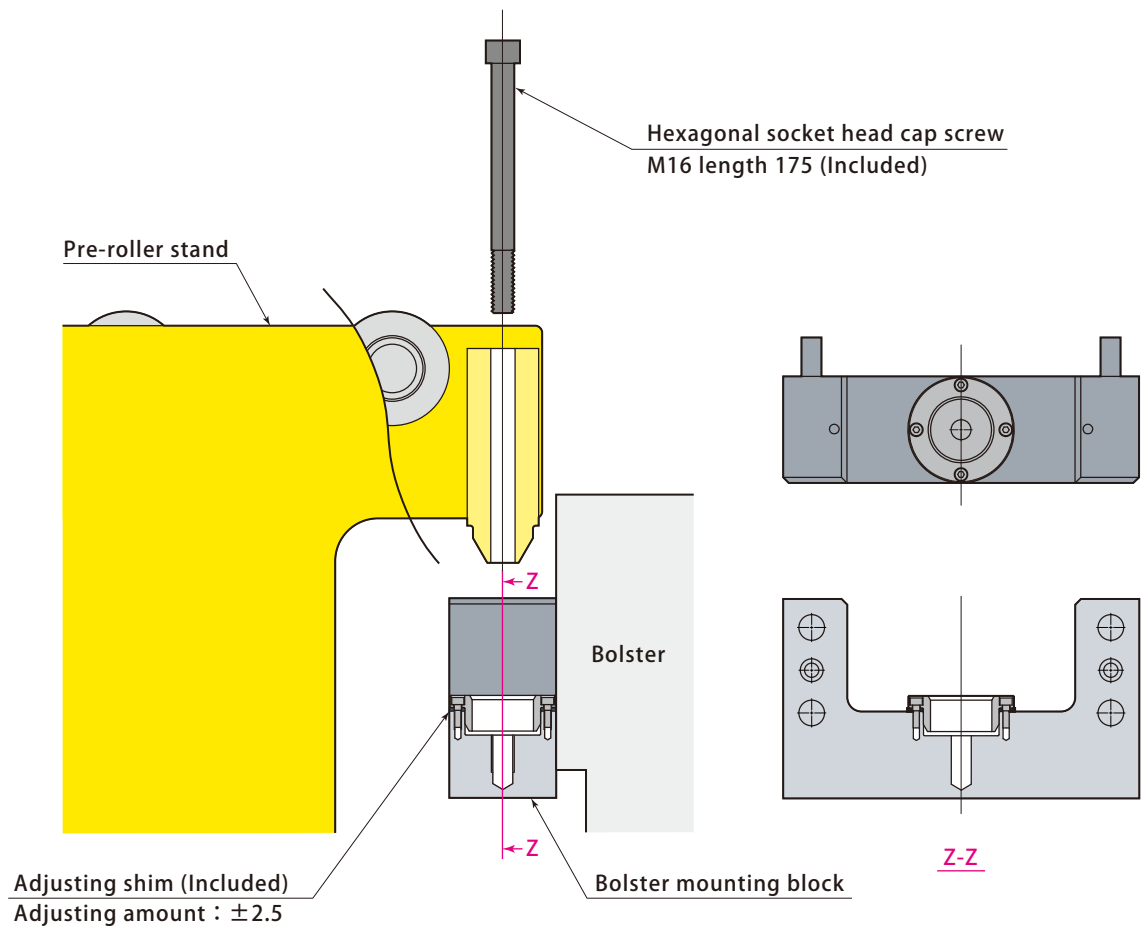
For 4 rows (With PRM-A)



PRM-A-30

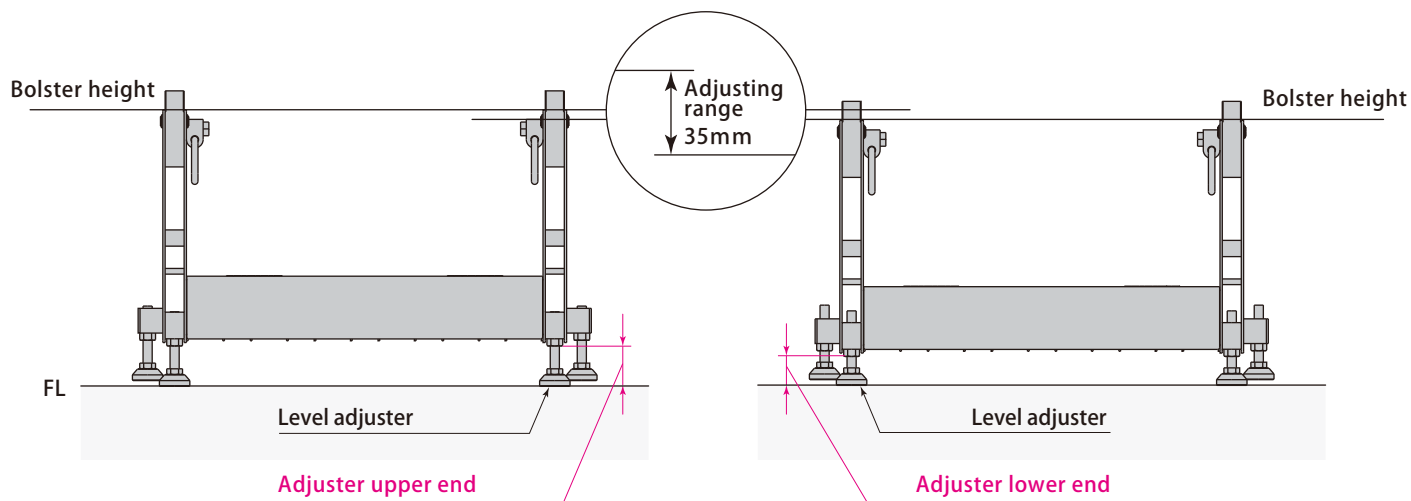
PRM-C-30



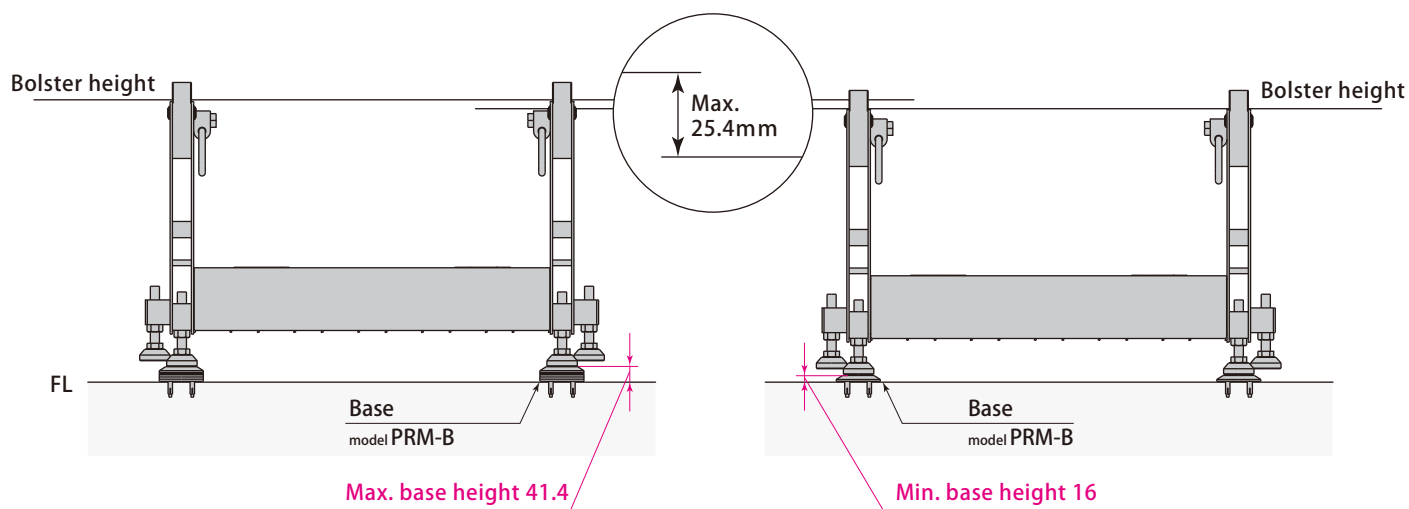


The pre-roller stand can be shared by multiple machines.

Adjust the level by the adjuster.



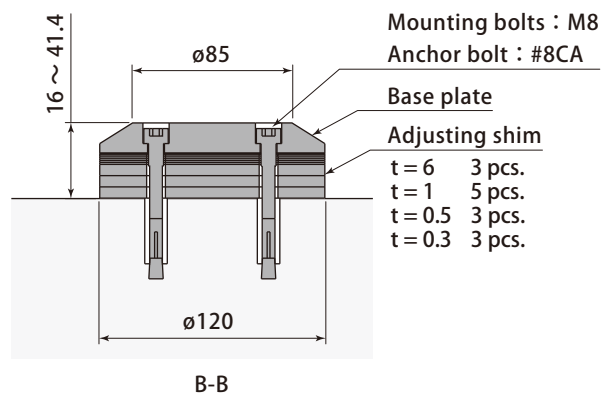
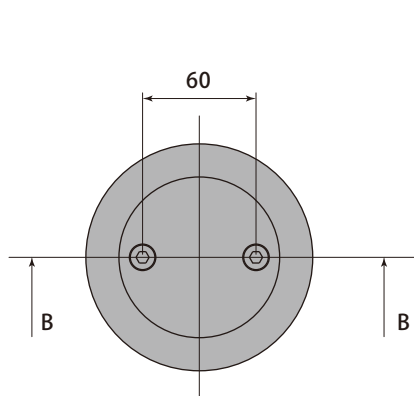
The installation of the base ( optional ) enables the level adjustment work eliminate.





Dimensions / Mounting Details

Base  
**PRM-B**



Model	PRM-B
Max.mass kg	3.4
Mounting bolts	M8 *
Anchor bolt	#8CA

\* The size varies depending on the base height.

Base height	Mounting bolts
16 ~ 20	2-M8 length 16
20.1 ~ 25	2-M8 length 20
25.1 ~ 30	2-M8 length 25
30.1 ~ 35	2-M8 length 30
35.1 ~ 40	2-M8 length 35
40.1 ~ 41.4	2-M8 length 40

# For your safety operation using Pascal pre-rollers

## Use of safety for Pre-rollers

### Safety inspection and Precaution

Pascal has developed pre-rollers in 1970's and been supplying it since then as a simple and affordable tool for die change operation.

It helps to pull the die out from the machine to the position where overhead crane or forklift can reach, which is widely adopted in the market specifically for small and medium sized press machines.

However, the pre-roller is subject to the impact of load and its rollers are exposing a risk of damage due to operational error and die loading overspeed, also cracks or deformations are not easily confirmed visually. When the die change is performed under this state, pre-rollers breaks and the die may be falling due to the damages which causes an accident resulting in inquiry or death.

Today the administrative responsibilities for labor accidents have been required more strictly. From point of view of "Safety first", we, Pascal has decided to make the pre-roller with over 1250mm length obsolete and recommends the pre-roller stand being developed as an alternative for the die change.

Industrial Safety and Health Act specifies "The employer shall take necessary measures to prevent dangers due to machines, instruments and other equipments", to ensure the safety of employees. In addition, Labor Contract Act also specifies "The employer shall provide sufficient consideration to ensure a healthy and safe working environment saving employee's body and life."

When die change operation is performed by pre-rollers, please be sure to make safety inspection before the operation and confirm if die can be changed safely.

### Safer die changing

