



**SolarCrystallizer 22**

## SolarCrystallizer 22

Our solar Czochralski-Puller for mass production of silicon crystals up to 230 mm diameter.

### Technical Data

#### Puller Data

Crucible diameter:	22" (up to 559 mm)
Crucible height:	up to 430 mm
Crystal diameter:	up to 230 mm
Crystal length:	up to 2.8 m
Charge weight:	up to 180 kg*
Vessel diameter:	approx. 934 mm
Vessel height:	approx. 1,520 mm
Gate valve diameter:	304 mm
Receiving chamber:	tube
Weight (Puller):	approx. 7,100 kg
Weight (power cabinet):	approx. 1,400 kg

\*with feeder (initial load max. 130 kg), w/o feeder up to 140 kg

#### Crucible Drive Unit

Lifting speed:	0.02 ... 200 mm/min
Stroke:	approx. 490 mm
Rotation speed:	1.0 ... 35 rpm

#### Crystal Drive Unit

Lifting speed:	0.1 ... 1,000 mm/min
Rotation speed:	1.0 ... 35 rpm

#### Utilities

Power rating:	max. 200 kVA*
Process gas:	max. 100 l/min
Compressed air:	6 ... 8 bar (operating pressure)
Water inlet pressure:	max. 5.0 bar
Water consumption:	approx. 200 l/min (subject to env. cond.)

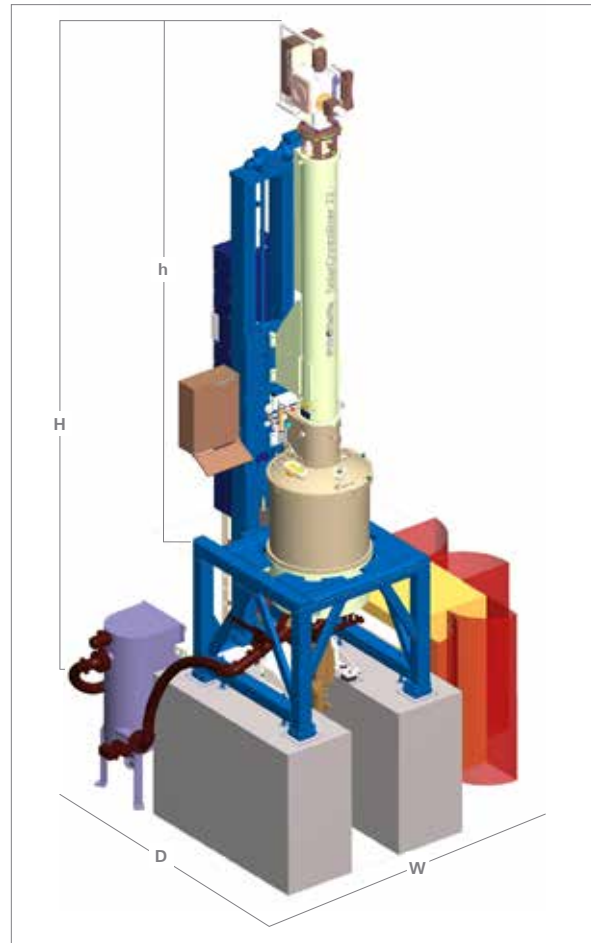
\*incl. vacuum pump, may vary depending on make/type

#### System Control

Automatic process control by PLC / PC:	equipped as standard
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#### Required Accessory

Hotzone  
Vacuum Pump Unit  
SiO Filter System



### Dimensions (approx.)

<b>Total Height</b>			
<b>(opened)</b>	(H)		8,780 mm
<b>(closed)</b>	(H)		7,350 mm
<b>above Operator Level</b>			
<b>(opened)</b>	(h)		7,180 mm
<b>Width</b>	(W)		3,900 mm
<b>Depth</b>	(D)		3,300 mm
<b>Clearance Height Lower Level</b>			2,500 mm

#### Optional Equipment

Production Management System  
Crucible Charging System Type TBS  
Ingot Handling Equipment  
Mobile Feeding System Type SiCharger  
Active Crystal Cooling  
Granular Feeding System  
(Optional equipment may increase utility consumptions)