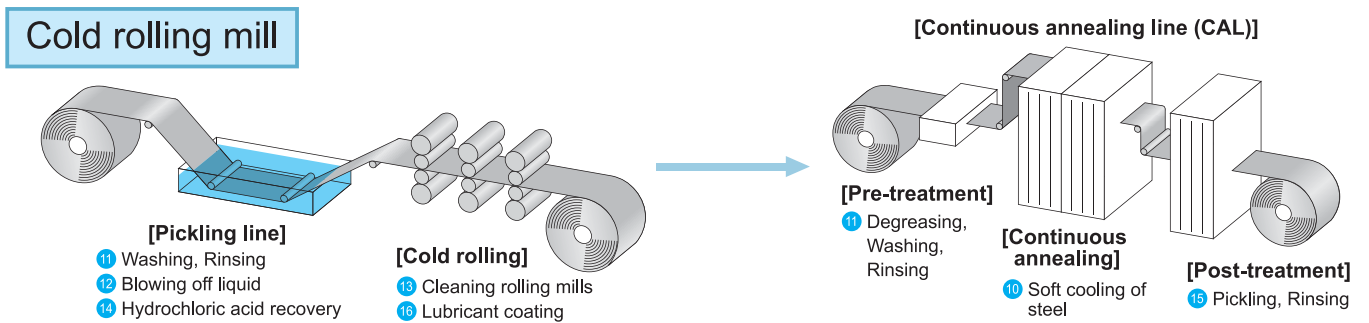
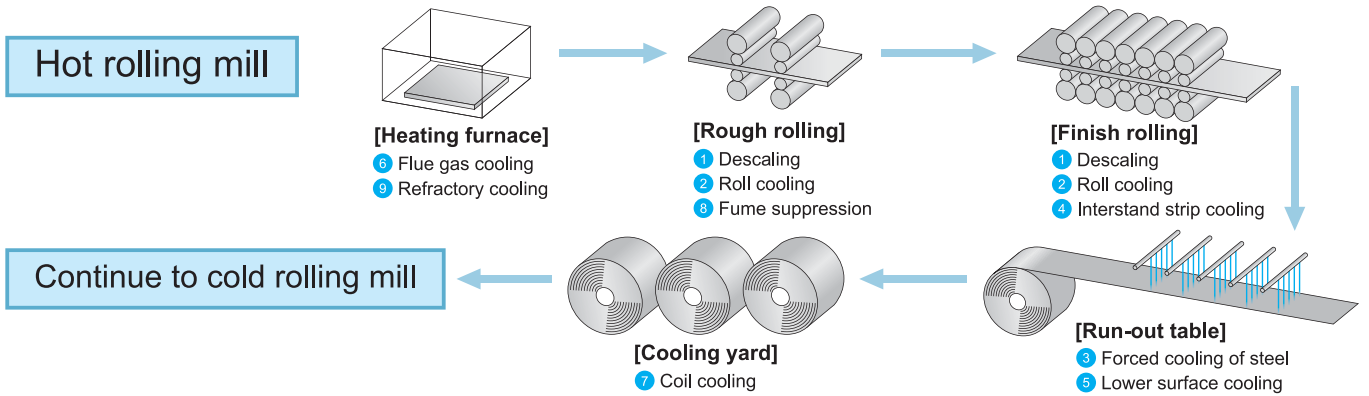
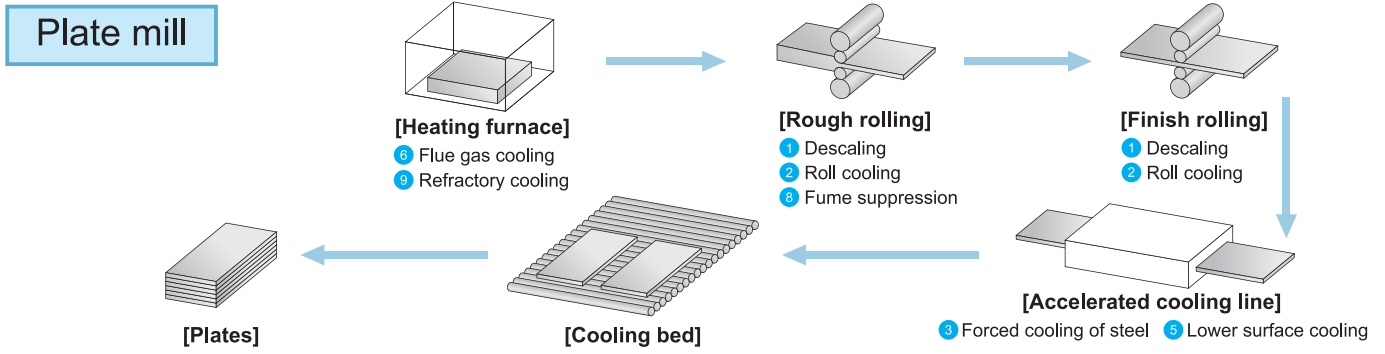


# Nozzle applications for each process



Process	No.	Application	Nozzle series	Nozzle description	Page
Plate mill/Hot rolling mill	1	Rough rolling, Finish rolling Descaling	TDSS	• Descaling	p.12
	2	Roll cooling	VVP WVVP VVEP WVVEP	• Standard flat spray • Thick flat spray • Even flat spray • Thick even flat spray	p.39 p.43 p.44 p.45
	3	Accelerated cooling line/ Run-out table Forced cooling of steel	BAVV WVVP VVEP WVVEP EJVJ OVVEP	• Blower-air driven fine fog spray • Thick flat spray • Even flat spray • Thick even flat spray • Air mixing type flat spray • Off-center even flat spray	p.37 p.43 p.44 p.45 p.46 p.50
	4	Finish rolling Interstand strip cooling	VVP WVVEP DDRP AJP SSXP	• Standard flat spray • Thick even flat spray • Ultra-thick even flat spray • Clog-resistant, full cone spray • Square full cone spray	p.39 p.45 p.47 p.56 p.61
	5	Accelerated cooling line, Run-out table Lower surface cooling	VVP+AS VVP WVVP WVVEP DDRP AJP SSXP	• Hydraulic/Pneumatic (dual-use) flat spray • Standard flat spray • Thick flat spray • Thick even flat spray • Ultra-thick even flat spray • Clog-resistant, full cone spray • Square full cone spray	p.23 p.39 p.43 p.45 p.47 p.56 p.61
	6	Heating furnace Flue gas cooling	GSIMII	• Large capacity fine fog spray	p.29
	7	Cooling yard Coil cooling	VVP LLYOH CLJ	• Standard flat spray • Blower LYOHM header • Semi-Dry Fog® cooling fan unit	p.39 p.71 p.76
	8	Rough rolling Fume suppression	GSIMII	• Large capacity fine fog spray	p.29
	9	Heating furnace Refractory cooling	GSIMII CLJ	• Large capacity fine fog spray • Semi-Dry Fog® cooling fan unit	p.29 p.76

Process	No.	Application	Nozzle series	Nozzle description	Page
Cold rolling mill	10	Continuous annealing Soft cooling of steel	BRASIKan® BIM BAVV MOMOJet® INVV TAIFUJet® LLYOH	• Brush-cleaning nozzle header • Fine fog spray • Blower-air driven fine fog spray • Self-cleaning, flat spray • Quick-detachable standard flat spray • Air nozzles • Blower LYOHM header	p.15 p.24 p.37 p.51 p.52 p.67 p.71
	11	Pickling line CAL/Pre-treatment Degreasing, Washing, Rinsing	BRASIKan® VVP INVV	• Brush-cleaning nozzle header • Standard flat spray • Quick-detachable standard flat spray	p.15 p.39 p.52
	12	Pickling line Blowing off liquid	TAIFUJet® SLNHA-H SLNB	• Air nozzles • Slit nozzles • Slit nozzles utilizing blower air	p.67 p.69 p.70
	13	Cold rolling Cleaning rolling mills	MOMO JJXP JA RJ SR ES	• Self-cleaning, flat spray • Standard full cone spray • Rotating tank cleaning nozzle • Low-pressure rotating cleaning • Low-speed rotating cleaning • Rotating cleaning nozzle	p.51 p.54 p.74 p.74 p.75 p.75
	14	Pickling line Hydrochloric acid recovery	INVV JJXP KKB	• Quick-detachable standard flat spray • Standard full cone spray • Fine fog hollow cone spray	p.52 p.54 *
	15	CAL/Post-treatment Pickling, Rinsing	BRASIKan® VVP INVV	• Brush-cleaning nozzle header • Standard flat spray • Quick-detachable standard flat spray	p.15 p.39 p.52
	16	Cold rolling Lubricant coating	BIM Header	• BIM integrated spray header	p.27

Remarks: For details of the products marked with \*, please contact us.