



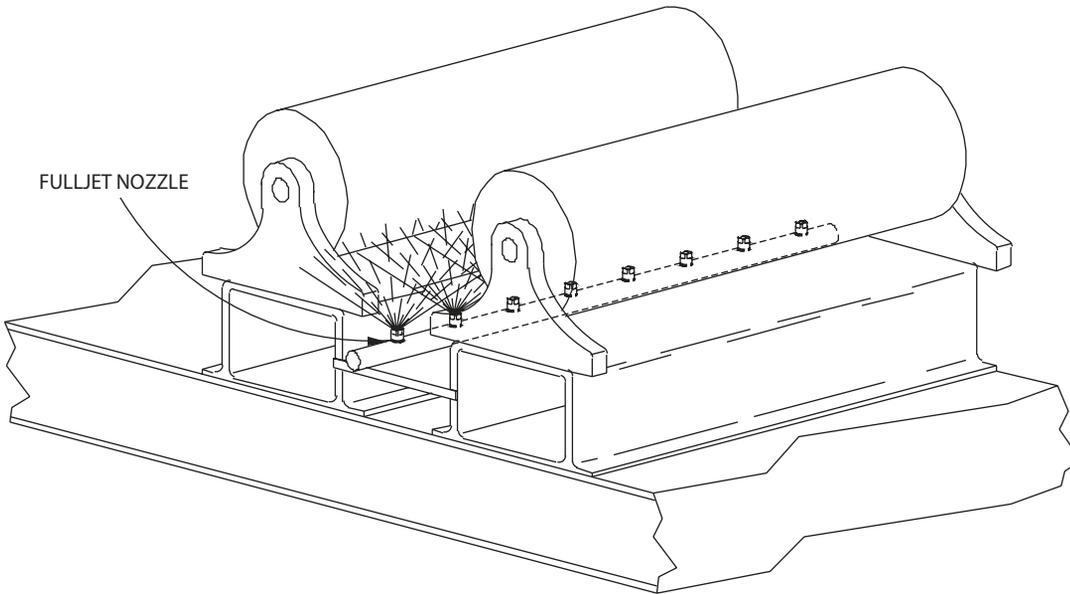
**FULLJET NOZZLES – UNIFORM DISTRIBUTION
ENHANCES STEEL QUALITY IN EVERY AREA
OF YOUR MILL**

Hot spots, cracks and defects – all costly but common problems that can lead to waste. One way to avoid quality problems like these is to use our FullJet spray nozzles. These nozzles feature a unique vane design with large flow passages to provide a uniform spray over a wide range of flow rates and pressures. This even and consistent spray coverage results in center-to-edge cooling and defect-free steel.

Our line of FullJet nozzles is extensive. Choose from a wide assortment of styles, sizes, capacities, connections, spray angles, impact areas, materials and more.

Common uses for FullJet nozzles include:

- Uniform cooling in continuous cast slabs, continuous cast billets, finishing
- Fast and uniform quenching
- Thorough liquor flushing





HHX FULLJET NOZZLES – PROVIDE UNIFORM DISTRIBUTION, RELIABLE OPERATION AND SIMPLIFIED MAINTENANCE IN BILLET CASTERS



Quality sprays contribute to better steel and increase the efficiency of your caster, and our HHX FullJet nozzles do exactly that – provide uniform cooling to ensure quality problems like diagonal cracks are avoided.

Key benefits and features include:

- A wide range of nozzle sizes allows you to select different spray densities to customize the spray zone cooling
- The HHX nozzle body features a hex body and allows the use of standard sockets for easy installation and removal
- A staked-in vane design ensures the vane is secure and will not fall out during caster operation

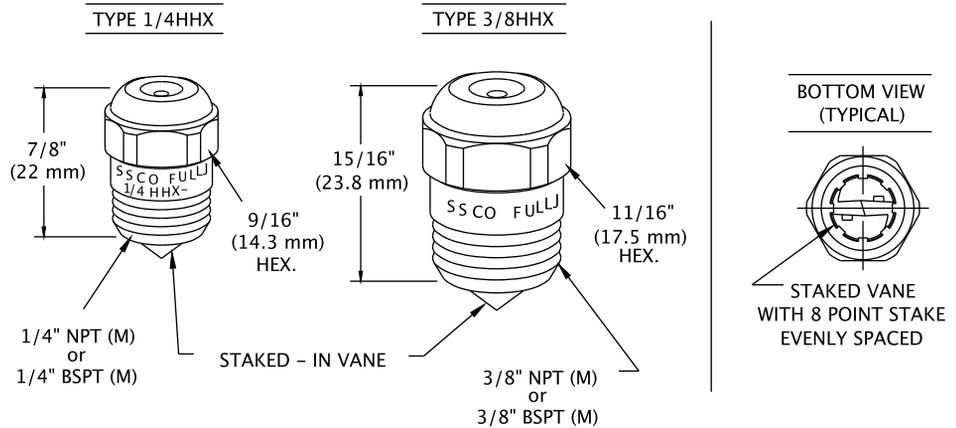
Specifications:

- Capacities range from .50 to 2.2 gpm (1.9 to 8.4 l/min) at 10 psi (.7 bar)
- All brass construction with a staked vane
- Inlet connections: 1/4" and 3/8"

ORDERING INFO

HHX FullJet Spray Nozzle		
1/4	HHX - 5	
 Inlet Conn.	 Nozzle Type	 Capacity Size

DIMENSIONS



PERFORMANCE

* At stated pressure in bar.

Nozzle Inlet Conn. NPT or BSPT (in.)	Nozzle No.	Orifice Dia. Nom.	Max. Free Passage Dia.	Capacity (Liters per minute)*										Spray Angle Degree*		
				mm	mm	.5	.7	1.5	2	3	4	5	6	7	10	.5
1/4	1/4HHX-5	1.95	1.3	1.6	1.9	2.7	3.1	3.7	4.2	4.7	5.1	5.5	6.5	60	65	61
	1/4HHX-6.5	2.4	1.6	2.1	2.5	3.5	4.0	4.8	5.5	6.1	6.7	7.1	8.4	45	50	46
	1/4HHX-8	2.8	1.2	2.6	3.0	4.3	4.9	6.0	6.8	7.5	8.2	8.8	10.4	68	80	76
	1/4HHX-10	2.8	1.6	3.3	3.8	5.4	6.2	7.4	8.5	9.4	10.2	11.0	13.0	58	67	61
	1/4HHX-12	3.2	1.6	3.9	4.6	6.5	7.4	8.9	10.2	11.3	12.3	13.2	15.5	71	81	72
	1/4HHX-14.5	3.6	1.6	4.7	5.5	7.8	9.0	10.8	12.3	13.7	14.8	15.9	18.8	78	89	75
3/8	3/8HHX-15	3.6	2.4	4.9	5.7	8.1	9.3	11.2	12.7	14.1	15.4	16.5	19.4	64	67	61
	3/8HHX-18	4.0	2.4	5.9	6.9	9.7	11.1	13.4	15.3	16.9	18.4	19.8	23	77	86	73
	3/8HHX-20	4.4	2.8	6.5	7.6	10.8	12.4	14.9	17.0	18.8	20	22	26	76	80	73
	3/8HHX-22	4.8	2.8	7.2	8.4	11.9	13.6	16.4	18.7	21	23	24	28	87	90	82

