



# NEOGIE ENGINEERING WORKS PVT. LTD.

AN ISO 9001:2015 CERTIFIED COMPANY



*Neogie Engineering Works Pvt. Ltd. proudly presents itself as a leading manufacturer of spray nozzles in India. Our industrial-grade spray nozzles, crafted from high-quality stainless steel and brass, cater to diverse applications across sectors such as steel plants, cooling systems, dust suppression units, metal treatment facilities, carbon manufacturing plants, oil-fired furnaces, wetting systems, air purification setups, fume control units, and gas cooling apparatuses. Customer satisfaction ranks high on our agenda, driving us to establish ourselves as industry leaders.*

*I Our dedicated research and development team consistently delivers innovative solutions, eliminating the need for clients to import spray nozzles. This not only ensures superior quality but also promotes economic sustainability within the Indian manufacturing industry by offering in-house alternatives to expensive imported products.*

*Our proficient engineers stand ready for technical consultations whenever required. Our esteemed clientele includes renowned Indian enterprises like Philips Carbon Black Ltd., Durgapur Steel Plant, Vizag Steel Plant, TATA Steel Ltd, and more. We cherish the opportunity to serve you, confident that our superior products and services will exceed your expectations, leaving little room for alternatives.*

## WHIRL JET NOZZLES

Standard Whirl Jet nozzles feature a hollow cone spray pattern with a ring-shaped impact area and spray angle of 34 to 90 . That produce a uniform distribution of small to medium sized droplet over a wide range of flow rates and pressures. Whirl Jet nozzles produce excellent result in applications requiring good atomisation of liquids at lower pressures, especially where quick heat transfer or effective air- borne droplet impingement is required.

### SMALL CAPACITY STANDARD ANGLE

**End Connection :**  
1/2" NPT/BSP, 3/8"  
NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:** Gas  
Cooling, Gas Washing  
Dust Suppression,  
Quenching



NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	7 BAR	1 BAR	7 BAR
N-10	4.5	9.0	7.5	12.1	70 °	75°
N-15	6.5	13.5	8.5	18.0	70 °	75°
N-20	9.0	18.2	15.5	24.0	70 °	75°
N-25	11.5	23.0	28.0	30.0	70 °	75°
N-30	13.8	27.0	31.0	36.0	70 °	75°

### SMALL CAPACITY WIDE ANGLE

NOZZLE TYPE	CAPACITY L.P.M.			SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	1 BAR	7 BAR
N-10W	3.0	6.0	7.5	120°	100°
N-15W	3.5	7.0	8.5	130°	100°
N-20W	6.5	12.8	15.5	110°	100°
N-25W	11.5	23.0	28.0	100°	95°
N-30W	12.8	26.0	31.0	100°	95°

**End Connection :**  
1/2" NPT/BSP, 3/8"  
NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:** Gas  
Cooling, Gas Washing,  
Water cooling, Dust  
Suppression.



### MEDIUM CAPACITY STANDARD ANGLE

**End Connection :**  
2" NPT/BSP,  
**Material:** Brass,  
SS 304/316.  
**Applications:** Gas  
Cooling, Gas Washing,  
Dust Suppression.



NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	7 BAR	1 BAR	7 BAR
N-35	19.1	380	465	500	70 °	75°

## FULL JET NOZZLES

Standard Full Jet nozzles feature a solid cone shaped spray pattern with a ring round impact area and spray angle of 43 to 106. These Nozzles Produce a Uniform Spray of medium sized droplet over a wide range of flow rates and pressures. This uniform spray distribution results form a unique vane design with a large flow passage and superior control characteristics.

### FULL JET STANDARD ANGLE WITH MOVABLE INTERNAL VANE

**End Connection :**  
1/4" NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Scrubbing and  
Cooling of gas,  
Dust Suppression  
in Coal Washery  
Plants, Quenching  
Washing.



### SQUARE SPRAY PATTERN FULL JET WITH MOVABLE INTERNAL VANE

NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	7 BAR	1 BAR	6 BAR
NSQ 10	4.5	8.5	10.2	11.0	65 °	60°
NSQ 12	5.5	10.2	12.3	13.2	75 °	65°

**End Connection :**  
1/4" NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Cooling,  
Quenching,  
Air Washing,  
Gas Washing,  
Scrubbe's  
Dust Control  
Fire Protection,  
Gas Cooling



### FULL JET NARROW ANGLE WITH MOVABLE VANE

**End Connection**  
3/8" NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Desuperheating  
of Steam,  
Cleaning  
and Washing  
of Products  
Requiring Deep  
Penetration.



### FULL JET WIDE ANGLE WITH MOVABLE VANE

NOZZLE TYPE	CAPACITY L.P.M.			SPRAY ANGLE	
	2 BAR	4 BAR	6 BAR	1 BAR	7 BAR
N 5.6W	3.5	4.5	5.5	120°	105°
N 6W	4.8	6.5	7.8	120°	105°
N 10W	6.0	8.5	9.8	120°	105°
N 14W	8.5	11.5	13.5	120°	105°
N 20W	12.0	16.5	19.5	120°	105°

NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	7 BAR	1 BAR	7 BAR
N 10	6.0	8.0	9.7	12.5	50 °	45°
N 15	9.4	12.7	15.5	16.5	65 °	60°
N 22	12.4	17.0	20.0	22.0	80 °	75°

NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	1 BAR	4 BAR	6 BAR	7 BAR	3 BAR	7 BAR
N 1530	9.7	13.5	9.7	18.0	15 °	15°
N 1550	16.0	23.0	15.5	30.0	15 °	15°
N 3030	9.7	13.5	20.0	18.0	30 °	30°

**End Connection :**  
1/8" NPT/BSP,  
1/4" NPT/BSP,  
3/8 NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Quenching and  
Cooling of coke,  
Gas Scrubbing,  
Deluging Combustible Material, Washing.



## FINE SPRAY (SEMI-SOLID) NOZZLES

Fine Spray (Semi-Solid) Nozzles use the liquid pressure alone to produce extremely fine droplets in a uniformly distributed hollow cone pattern, often resulting in a misting performance and has a spray angle of approximately 80°.

**End Connection :**  
9/16" UNF (M).  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Evaporative,  
Cooling, Moistening,  
Humidifying.



## CLUSTER NOZZLES

**End Connection :** 1" / 3/4"  
NPT/BSP (F),  
**Material:** SS 304, SS 310, SS 316  
**Volume:** 1000 to 3000 LPM  
**Working Pressure:** 6-12 kg/cm.  
**Angle:** 90° - 130°  
**Spray Pattern :** Complete Solid Cone  
with uniform droplet distribution.  
**Applications:** Use Cooling in ABC  
Chamber In Sponge Iron Plants,  
Dust Controlling, Gas Quenching &  
Fog Misting.



## MULTI CONE NOZZLE WITH INTERNAL NOZZLE DESIGN

**End Connection :** 3/4" BSP (F) &  
1/2" BSP (F)  
**M. O. C. :** SS 310, SS 304  
**Volume:** 1000 to 2500 LPH  
**Working Pressure:** 6-12 kg/cm.  
**Angle:** 90° - 130°  
**Spray Pattern :** Complete Solid Cone  
**Applications:** Used for ABC  
Cooling in Sponge Iron Plant



## FLAT JET NOZZLES

Standard Flat Jet nozzles produce a flat spray pattern with high impact and having spray angles of 50° to 120°. These nozzles also provide unobstructed flow passages to minimise clogging.

NOZZLE TYPE	CAPACITY G.P.H.	SPRAY ANGLE
	7 BAR	7 BAR
N 6	6	80°
N 20	20	80°
N 40	40	80°
N 55	55	80°

### MEDIUM CAPACITY

**End Connection :**  
1/8" NPT to 3/4" NPT  
**Material:** Brass,  
SS 304/316.  
**Applications:** Metal  
Cleaning and  
Processing Spray  
Coating Rolls  
Cooling, Descaling.



### LARGE CAPACITY

**End Connection :**  
1/8" NPT to 3/4" NPT  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Descaling,  
Digressing and  
Rinsing, Spray  
Cooling, Sand, Coal  
and Strip Washing  
and Cleaning.



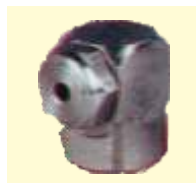
### DEFLECTO TYPE

**End Connection :**  
1/4" NPT/BSP (M)  
**Material:** Brass,  
SS 304/316.  
**Applications:** Cooling  
Conveyor Belts, Cooling  
Rollers in Steel Plants,  
Forming Water screens,  
Washing Coal in  
Conveyors, Fire Protection,  
Product Washing.



## FULL JET ANGLE TYPE NOZZLES

**End Connection :**  
1/2" NPT/BSP, 3/8"  
NPT/BSP.  
**Material:** Brass,  
SS 304/316.  
**Applications:**  
Spraying into Steam  
& Gas Lines,  
Spraying Into  
Reactor Vessels,  
Spraying into Tanks.



NOZZLE TYPE	CAPACITY L.P.M.				SPRAY ANGLE	
	3 BAR	4 BAR	6 BAR	10BAR	3 BAR	6 BAR
NV 1	8	9	11	14	110°	120°
NV 2	16	18	22	30	90°	100°
NV 3	40	45	55	70	90°	100°
NV 4	150	180	220	300	80°	85°

NOZZLE TYPE	CAPACITY L.P.M.			SPRAY ANGLE	
	3 BAR	6 BAR	10BAR	3 BAR	6 BAR
NV 1	200	280	350	50°	55°
NV 2	230	325	420	50°	55°
NV 3	600	850	106	50°	55°

NOZZLE TYPE	CAPACITY G.P.H.	SPRAY ANGLE
	60 PSIG	60 PSIG
NK 2	5	120°
NK 5	4.5	135°
NK 10	9.5	135°
NK 20	19.0	130°

NOZZLE TYPE	CAPACITY G.P.H.	SPRAY ANGLE
	100 PSIG	80 PSIG
NA 9.5	2.8	46°
NA 15	4.4	60 / 61°
NA 20	5.9	70 / 73°
NA 25	7.4	60°
NA 32	9.4	65°
NA 50	14.8	85°

## SPIRAL NOZZLES

**End Connection :**  
1/4" BSP/BSPT (M/F), 1" (M) (F) BSP/BSPT.  
**Material:** BRASS or SS,  
**Angle:** 50° - 120°  
**Volume:** 5LPM - 50LPM  
**Spray Pattern:** Hollow Cone & Full Cone  
**Applications :** Dust Suppression of Coarse Particles,  
Cooling, Weight etc.  
**Feature :** *Non Cologing Type*, One Piece Design



## SMALL CAPACITY (Dovetail)

**End Connection :** 1/8" NPT/BSP (M)  
to 3/8" NPT/BSP (M).  
**Material:** Brass, SS 304/316.  
**Applications:** Forming Water Screens,  
Washing Cool,  
Product Washing,  
Conveyor  
Belt Cooling.



NOZZLE TYPE	CAPACITY L.P.M.			SPRAY ANGLE	
	40 PSIG	60 PSIG	80 PSIG	40 PSIG	80 PSIG
NV 1	1.5	2.0	2.25	110°	120°
NV 2	3.8	4.5	5.3	110°	120°
NV 3	7.5	9.5	10.6	110°	120°

### NOZZLE FOR SLAB CASTERS



**End Connection:** As Required

**Material:** Brass

**Application:** Uniform Cooling

### BRASS FULL JET NOZZLE



**End Connection:** 3/8" BSP (F)  
1/2" BSP (M/F)

**Material:** Brass/SS  
Working Pressure: 2.8kg/cm<sup>2</sup>

**Application:** For Billet Cooling in Continuous Casting

### BURNER TIP

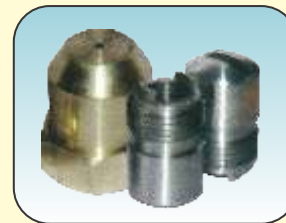


**End Connection:** 3/8" BSP (F)/(M) or 1/2" BSP (F/M)

**Material:** Brass / SS  
Working Pressure: 2.8 kg/cm<sup>2</sup>/40psi

**Application:** Oil Spray & Automization For Carbon Manufacturing Plants

### BILLET COOLING NOZZLE



### DEFLECTO JET NOZZLES



**End Connection:** 1/2" BSP / NPT (M/F)

**Material:** SS 304, SS 316

**Application:** Surrounding Cooling Water Screen

### FLAT JET NOZZLE



**End Connection:** 1" NPT to 2" NPT

**Material:** Brass, SS 304 / 316

**Application:** Descaling, Degreasing and Rinsing, Spray Cooling, Stand, Col and Gravel Washing, Air Strip Washing and Cleaning

NOZZLE TYPE	CAPACITY L.P.M.			SPRAY ANGLE	
	3 BAR	6 BAR	10BAR	6 BAR	14 BAR
NLV - 1	200	280	350	50 °	55°
NLV - 2	230	325	420	50 °	55°
NLV - 3	600	850	106	50 °	55°

### AIR SWIRLER



**Material:** SS 304/ SS 310

**Application:** Swirling Of Air In Sponge Iron Sector



# SPRINKLERS

**NEW**

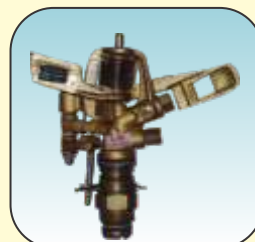
Below is the list of the of the main sprinklers available in our product range, and are specially developed by us for various purposes. The main arenas of sprinkler usage however is largely of two types. A] Watering Irrigation and Vegetation.  
B] Ground Wetting to Suppress Dust Pollution.

## MODEL - A



**Material of Construction:** PVC  
**End Connection Thread:** ½" BSP [M]  
**Working Pressure:** 3 kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 20-25 Feet  
**Volume:** 15 Litres / Minute  
**Application:** For Vegetation And Watering  
**Available in Full & Part Circle**

## MODEL - B



**Material of Construction:** Brass Casting  
**End Connection Thread:** ½" BSP [M]  
**Working Pressure:** 3 kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 20-25 Feet  
**Volume:** 15 Litres / Minute  
**Application:** For Vegetation And Watering  
**Available in Full & Part Circle**

## MODEL - C



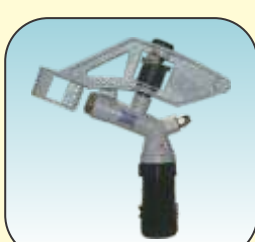
**Material of Construction:** Brass Casting  
**End Connection Thread:** 3/4" BSP [M]  
**Working Pressure:** 4 kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 30 - 35 Feet  
**Volume:** 48 Litres / Minute  
**Application:** For Dust Suppression and Watering  
**Available in Full & Part Circle**

## MODEL - D



**Inlet Flange:** Aluminium Casting  
**Reducer:** 3 1/2" BSP, [F]  
**Swivel:** 4 Kg/cm  
**Grease Nipple:** 30-35 Feet  
**Water Ways:** 48 Liters / Minute.  
**Application:** For Dust Suppression & Watering. This Sprinkler has been specially developed conventional sprinklers are A] All casting body, Hence less prone to being stolen B] fully covered spring, brush, washer etc protected from dust and water, hence longer life C] Ultrafine particles of water discharged, hence gives proper rain effect and uniform ground wetting.

## MODEL - E



**Material of Construction:** Aluminium Casting  
**End Connection Thread:** 1 1/4" BSP, [M/F]  
**Working Pressure:** 4.5 - 5 Kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 60-70 Feet  
**Volume:** 200 Liters / Minute.  
**Application:** For Large Area Wetting And Dust Suppression  
**Available in Full & Part Circle**

## MODEL - F



**Material of Construction:** Aluminium Casting  
**End Connection Thread:** 1 1/2" BSP, [F]  
**Working Pressure:** 4.5 - 5 Kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 90 Feet  
**Volume:** 300 Liters / Minute.  
**Application:** For Large Area Wetting And Dust Suppression  
**Available in Full & Part Circle**

## MODEL - G



**Material of Construction:** OR Aluminium Casting  
**End Connection Thread:** 2" BSP, FLANGE TYPE  
**Working Pressure:** 5 - 6 Kg/cm<sup>2</sup>  
**Coverage [Radius of Throw]:** 130 Feet  
**Volume:** 450-500 Liters / Minute.  
**Application:** For Large Area Wetting [Ash Yard Wetting] And Dust Suppression  
**Available in Full & Part Circle**

## FIRE MONITER



**Inlet Flange:** 2", 3" 4" as required  
**Reducer:** 3" x 2.5" Seamless  
**Swivel:** Gun Metal - IS 318  
**Grease Nipple:** Brass 319  
**Water Ways:** Brass 319  
**Nozzle:** MS Seamless Tube - 3"  
**Handle Bar:** Aluminum Alloy  
**Application:** MS Pipe Fire Fighting, Large Area Wetting.



## DRY FOG SYSTEM

**NEW**

### INTERNAL MIX TYPE



**End Connection:** Water 3/8" BSP (F)-Air 1/4 BSP (F)  
**Material:** Brass

**Application:** Atomized water droplets, Blown by air dampens dust particles and precipitates them. System requires clean air and water for proper functioning.

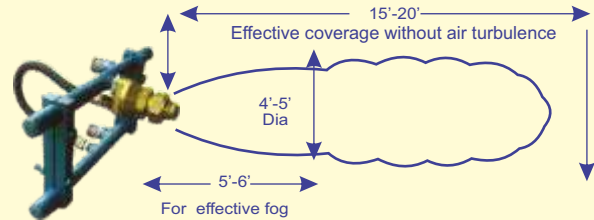
**Water Pressure:** 1-3kg/cm

**water Volume:** 0.5-2 LPM

**Air Pressure :** 4-5 kg/cm

**Air Volume :** 300-330 LPM

**For One Nozzle**



### EXTERNAL MIX TYPE (OPP ENTRY)



**End Connection:** 1/4", 3/8" BSP/  
BSPT (F)

**Material:** Ss316, SS 310, Brass

**Application:** Pollution Control at  
Transfer Points And Junction Points,  
Mistification, Humidification and  
Cooling.

### EXTERNAL MIX TYPE (RIGHT ANGLED ENTRY)



**End Connection:** 9/16" UNF (F) for Air & 1/8" UNF  
(F) for Water

**Material:** Brass, SS 316

**Working Pressure:** 0.5 kg/cm

**Water Volume:** 0.2 - 0.5 LPM

**Air Pressure:** 4-4.5Kg / cm

**Air Volume:** 130 - 150 LPM

**Applications :** Dust Suppression



### WITH PROTECTIVE COVER ALM/C.I. WATER NOZZLE



**End Connection:** 1/2" BSP (F) 1" BSP (F)  
as required

**Material :** Body is Made od C. I., Or  
Alluminium Casting, Nozzle is made of  
Brass and flite is made of SS 304

**Water Pressure:** 2.8-3 Kg/cm

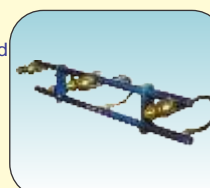
**Water Volume:** 3-10 LPM

**Applications:** Dust Suppression



Dry Fog System consists of air atomizing nozzle fitted in  
steel header along with hose & flow control ball valves and  
pressure gauges. Each Header Consists of:

1. Dry Fog / Air Mist Nozzle
- (1 for single header, 2 for double header, 3 for triple  
header)
2. SS 304 pipes (1/2" Normal Bore)
3. Ms Clamps
4. Pressure Gauges
5. Ball Valves
6. Connecting Rubber Hose to Connect nozzle with air line
7. Brass manifold to fit gauges and ball valve
8. 3 feet long rubber hose for connection (1/2", 3/4" BSP[F])



**Principle:** Water and Air are mixed internally to provide a fine fog. This Fog gives a film of water coating on ultra fine dust particles, thus increase their weight, and subsequently precipitating them. Each Spray can be adjust by air and water Pressure changes to control / water density and throw mist spray.

## WATER FILTER

Technical data of water filter to ensure smooth running system inspite of dust contaminated water:

- A) Duplex filter 1" inch & outlet [or as reqd with inside SS strainer and SS bottom flash out valves.
- B) Filtration - 105 Microns (or as reqd)
- C) Filter housing dia 100mm, height 270mm (or as reqd)
- D) Strainer dia - 70mm, height - 200mm (or as reqd)
- E) For 6 kg /sqcm input pressure, 4-5 cubic metre per hour, output volume (or as reqd)



**WATER FILTER**

NEOGIE ENGINEERING WORKS PVT. LTD.



ATOMIZER ASSEMBLY WITH NOZZEL



BI-FLUID GUN WITH NOZZLE



TSL NARROW HEADER



TSL WIDE HEADER



100 TPD ABC GUN



TSL DRY-FOG HEADER



SINGLE INJECTOR FOR OIL SPRAY OF ALUMINIUM PLANT



DOUBLE INJECTOR FOR OIL SPRAY OF ALUMINIUM PLANT





**GCT GUN**



**GREASE ATOMIZING NOZZLE**

**NEOGIE ENGINEERING WORKS PVT. LTD.**



**EDUCTOR NOZZLE**

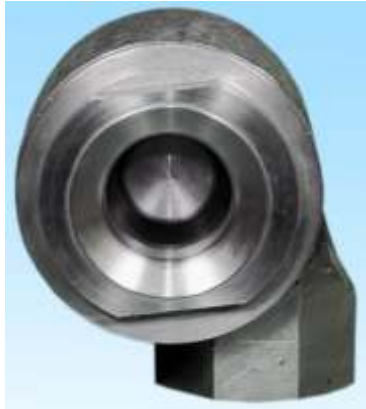


**FTC NOZZLE**



**NOZZLE HEAD FOR ABC GUN**

**NEOGIE ENGINEERING WORKS PVT. LTD.**



**HOLLOW CONE NOZZLE FOR VSP**



**FIRE FIGHTING NOZZLE**



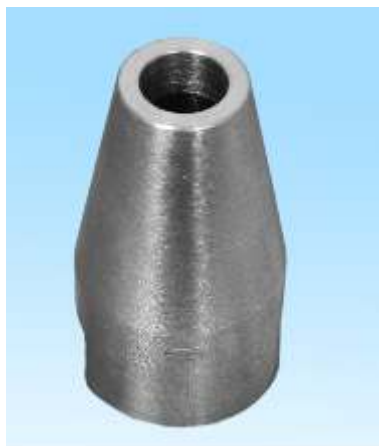
**LOW ANGLES  
SPRAY NOZZLE  
FOR TATA STEEL**



**HERTWICH FURNACE  
NOZZLE**



**TATA STEEL SCRUBBER NOZZLE**



**FLAME TIP FOR  
CARBON PLANT**



**REACTOR HEATING NOZZLE**



**F-94 FOR CARBON PLANT**



**WATER PURGING & AIR PURGING NOZZLE**



**BURNER TIP NOZZLE**



**QUENCHING NOZZLE**



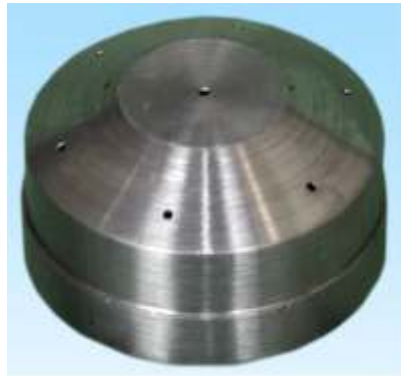
**GCT GUN NOZZLE**



**BURNER TIP & NOZZLE  
FOR POWER PLANT**



**PROPEN GAS BURNER NOZZLE**



**100 TPD ABS GUN NOZZLE**



**QUENCHING TOWER  
NOZZLE (BI-FLUID)**



**GAS COOLING & QUENCHING NOZZLE**



**MIXING CORE MODIFIER FOR  
CARBON PLANT**



**NOZZLE CASHING**



**STANDARD CAPACITY GOOSE NECK  
NOZZLE FOR TATA STEEL**



**LARGE CAPACITY HOLLOW  
CONE NOZZLE FOE TATA STEEL**



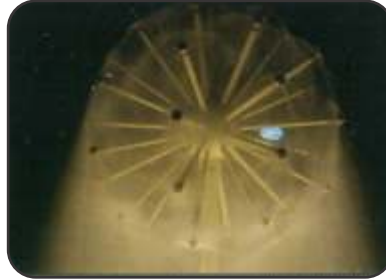


# FOUNTAINS

HALF BALL FOUNTAIN



FULL BALL FOUNTAIN



COLUMNAR



DOME



DOME



FLOWER JET



FLOWER JET



COLUMNAR



FOAM JET



FOAM JET



**NEW**



NEOGIE ENGINEERING WORKS PVT. LTD.



## NEOGIE ENGINEERING WORKS PVT. LTD.

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