

Annexure - A2 B2
Part-Q: Vortex Finder

PART	SR. NO	Name of the Activity	Scope of Work	Nature of Work	Unit Measure ment (UoM)	Qty.	Unit Rate in Rs.	Total Amount in Rs.
Vortex finder								
Q	1	Vortex finder ring removing	Make necessary arrangement for locking of collapsed / hanging vortex finder ring by providing chain blocks to keep it in fixed position. Cut the damaged vortex finder ring by cutting rod/plasma cutting. Removal of cut pieces of vortex finder either from the cyclone manhole door (Approx. EL 32.0 mtrs) or from the seal pot manhole door (Approx. EL 11.0 mtrs) in the scope of contractor, Shifting of all debris / scrap from site to the scrap yard. All Counsumables in contractor scope for arrangement, cutting and removing complete vortex finder ring. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.	BD	No.	2	1,33,447.00	2,66,894.00
Q	2	Vortex finder Eccentric sleeve removing	Make necessary arrangement for locking of collapsed / hanging vortex finder Eccentric Sleeve by providing chain blocks to keep it in fixed position. Cut the damaged vortex finder Eccentric Sleeve by cutting rod/plasma cutting. Removal of cut pieces of vortex finder either from the cyclone manhole door (Approx. EL 32.0 mtrs) or from the seal pot manhole door (Approx. EL 11.0 mtrs) in the scope of contractor, All Counsumables in contractor scope for arrangement, cutting and removing complete vortex finder Eccentric Sleeve. Shifting of all debris / scrap from site to the scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.	BD	No.	2	80,070.00	1,60,140.00
Q	3	Vortex finder Support removing (Total 20 nos. Support)	Make necessary arrangement for locking of hanging vortex finder Support by providing chain blocks to keep it in fixed position. Cut the damaged vortex finder Support by cutting rod/plasma cutting/ Grinding from Cyclone casing duct at cyclone top. Removal of cut pieces of vortex finder support from the cyclone manhole door (Approx. EL 32.0 mtrs) or from the seal pot manhole door (Approx. EL 11.0 mtrs) in the scope of contractor, All Counsumables in contractor scope for arrangement, cutting and removing complete vortex finder Support (Total 20 nos. Support) Shifting of all debris / scrap from site to the scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.	BD	No.	1	62,348.00	62,348.00

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Q	4	Vortex Finder Support , Ring, and Eccentric Sleeve removing	<p>Make necessary arrangement for locking of collapsed / hanging vortex finder ring, Support and Eccentric Sleeve by providing chain blocks to keep it in fixed position.</p> <p>Cut the damaged vortex finder ring, support and Eccentric Sleeve by cutting rod/plasma cutting/grinding . Removal of cut pieces of vortex finder support, ring and Eccentric sleeve either from the cyclone manhole door (Approx. EL 32.0 mtrs) or from the seal pot manhole door (Approx. EL 11.0 mtrs) or Cyclone Casing duct in the scope of contractor, cut the cyclone casing plate for removing of vortex finder Ring, support and Eccentric Sleeve in three / two pieces from cyclone cylindrical protion if required, All Counsumables in contractor scope for arrangement, cutting and removing of complete vortex finder ring, Support & Sleeve</p> <p>Shifting of all debris / scrap from site to the scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.</p>	BD	No.	1	2,80,996.00	2,80,996.00
Q	5	Vortex Finder Ring Erection	<p>Shifitng of new vortex finder Ring at site (Approx. height 35 mtrs) from store. Make necessary arrangement for lifting and cut the cyclone casing plate for insertion of vortex finder Ring in three / two pieces from cyclone cylindrical protion. Fix the vortex finder Ring as per E-I-C and Drawing. Do full welding of vortex finder ring , and welding of stiffners as per EIC and drawing. All site welded joint ultrasonic testing (UT) shall be done. Followed by repair if required. Revival of cyclone casing plate by full welding (inside & outside). Scrap material to be shifted to scrap yard. All Counsumables in contractor scope for arrangement, erection of complete vortex finder ring. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.</p> <p>Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.</p>	BD	No.	1	1,69,970.00	1,69,970.00

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Q	6	Vortex Finder Support Erection (Total 20 nos. Support)	Shifitng of new vortex finder Support at site (Approx. height 35 mtrs) from store. Make necessary arrangement for lifting for insertion of vortex finder Support from cyclone. Check and repair / replacement of the burn/damaged plate of cyclone for fixing of new vortex finder Supports. Fix the vortex finder Support as per E-I-C and Drawing. Do full welding (Inside and Out side) of vortex finder Support with Cyclone duct, and welding of stiffners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clit to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. All Counsumables in contractor scope for arrangement, erection of complete vortex finder support. (Total 20 nos. Support). If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	1	1,01,066.00	1,01,066.00
Q	7	Vortex Finder Eccentric Sleeve Erection	Shifitng of new vortex finder Eccentric Sleeve at site (Approx. height 35 mtrs) from store. Make necessary arrangement for lifting and cut the cyclone casing plate for insertion of vortex finder Eccentric Ring in three / two pieces from cyclone cylindrical protion. Fix the vortex finder Eccentric Sleeve as per E-I-C and drawing. Do full welding of vortex finder Eccentric Sleeve with RIng of Vortex finder , and welding of stiffners as per EIC. All site welded joint ultrasonic testing (UT) shall be done. Followed by repair if required. Revival of cyclone casing plate by full welding (inside & outside). Scrap material to be shifted to scrap yard. All Counsumables in contractor scope for arrangement, erection of complete vortex finder Eccentric Sleeve. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	1	1,27,477.00	1,27,477.00

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Q	8	Vortex Finder Support , Ring, and Eccentric Sleeve Replacement.	<p>Shifting of new vortex finder ring, supports along with eccentric sleeve at site (Approx. height 35 mtrs). Make necessary arrangement for locking of collapsed / hanging vortex finder ring , support , and eccentric sleeve by providing chain blocks to keep it in fixed position. Dismantle the old vortex finder ring, supports (20 nos.) and eccentric sleeve by cutting rod / Plasma cutting machine. Check and repair / replacement of the burn/damaged plate of cyclone for fixing of new vortex finder Supports.</p> <p>Make necessary arrangement for lifting and cut the cyclone casing plate for new insertion / old removing of vortex finder support , ring and eccentric sleeve from cyclone cylindrical portion. Fix the new supports (20 nos.) as per E-I-C and Drawing. After fixing of all support fix the vortex finder ring and eccentric sleeve as per E-I-C and Drawing. Do full welding of vortex finder ring, supports, stiffeners and eccentric sleeve as per EIC and Drawing. All site welded joint ultrasonic testing (UT) shall be done. Followed by repair if required. Revival of cyclone casing plate by full welding (inside & outside). e and Out side) of vortex finder Support with Cyclone duct, and welding of stiffeners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clip to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. All Consumables in contractor scope for arrangement, replacement of complete vortex finder Eccentric Sleeve, ring and support. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.</p> <p>Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.</p>	BD	No.	1	6,97,598.00	6,97,598.00

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Q	9	Vortex Finder Eccentric Sleeve, Ring and Support Strengthening / Repairing / Reclamation	Make necessary arrangement for Vortex finder Eccentric sleeve , ring and Support strengthening, repairing, reclamation. Shifting of new plates of SANDVIK 253MA material to site for repair/strengthening work of vortex finder support, ring along with eccentric sleeve. Checking of vortex finder ring, all supports and eccentric sleeve for any damage, bend and erosion. Repair the same by cutting, straightening, welding, built-up and additional plate patch-up as per E-I-C. make require size of stiffner plate from SANDVIK 253 MA plate and weld as per EIC.All Consumables in contractor scope for arrangement, repairing, strengthening, reclamation of complete vortex finder Eccentric Sleeve, ring and support..(Inside and Out side) of vortex finder Support with Cyclone duct, and welding of stiffners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clip to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	5	1,87,584.00	9,37,920.00
Q	10	Vortex Finder Support Strengthening / Repairing / Reclamation (Total 20 nos. Support)	Shifting of new plates of SANDVIK 253MA material to site for repair/strengthening work of vortex finder supports. Checking of vortex finder all supports for any damage, bend and erosion. Repair the same by cutting, straightening, welding, built-up and additional plate patch-up as per E-I-C. make require size of stiffner plate from SANDVIK 253 MA plate and weld as per EIC.All Consumables in contractor scope for arrangement, repairing, strengthening, reclamation of complete vortex finder support. (Total 20 nos. Support). .(Inside and Out side) of vortex finder Support with Cyclone duct, and welding of stiffners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clip to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	1	53,596.00	53,596.00

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Q	11	Vortex Finder Ring Strengnhning / Repairing / Reclamanation	Shifing of new plates of SANDVIK 253MA material to site for repair/strengthening work of vortex finder ring. Checking of vortex finder ring for any damage, bend and erosion. Repair the same by cutting, streightening, welding, built-up and additional plate patch-up as per E-I-C. make require size of stiffner plate from SANDVIK 253 MA plate and weld as per EIC.All Counsumables in contractor scope for arrangement, repairing, strenghtning, reclamanation of complete vortex finder ring. (Inside and Out side) of vortex finder Support with Cyclone duct, and welding of stiffners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clit to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	2	53,596.00	1,07,192.00
Q	12	Vortex Finder Eccentric Sleeve Strengnhning / Repairing / Reclamanation	Shifing of new plates of SANDVIK 253MA material to site for repair/strengthening work of vortex finder eccentric sleeve. Checking of vortex finder eccentric sleeve for any damage, bend and erosion. Repair the same by cutting, streightening, welding, built-up and additional plate patch-up as per E-I-C. make require size of stiffner plate from SANDVIK 253 MA plate and weld as per EIC.All Counsumables in contractor scope for arrangement, repairing, strenghtning, reclamanation of complete vortex finder Eccentric Sleeve. Scrap material to be shifted to scrap yard. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope. Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.	BD	No.	2	53,596.00	1,07,192.00

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Q	13	Vortex Finder Support , Ring, and Eccentric Sleeve Erection	<p>Shifting of new vortex finder ring, supports along with eccentric sleeve at site (Approx. height 35 mtrs).</p> <p>Check and repair / replacement of the burn/damaged plate of cyclone for fixing of new vortex finder Supports.</p> <p>Make necessary arrangement for lifting and cut the cyclone casing plate for new insertion of vortex finder support , ring and eccentric sleeve from cyclone cylindrical portion. Fix the new supports (20 nos.) as per E-I-C and Drawing. After fixing of all support fix the vortex finder ring and eccentric sleeve as per E-I-C and Drawing. Do full welding of vortex finder, supports, stiffeners and eccentric sleeve. All site welded joint ultrasonic testing (UT) shall be done. Followed by repair if required. Revival of cyclone casing plate by full welding (inside & outside). of vortex finder Support with Cyclone duct, and welding of stiffeners as per EIC. Supports box to be prepared for covering hooks, Necessary anchors, clut to be welded for refractory work on supports/box. Scrap material to be shifted to scrap yard. Cutting electrodes and other consumables to be arranged by party. If scaffolding is already built up-to vortex finder bottom area, necessary change / additional scaffolding preparation shall be in contractor scope.</p> <p>Note: Special welding electrodes Sandvik 22.12 HTR and E307-16 shall be provided by GIPCL.</p>	BD	No.	1	4,59,525.00	4,59,525.00
		Part-Q: Total						35,31,914.00