

**SEAGULL CONSULTANTS PRIVATE LIMITED email: scplvinayak@msn.com**  
**RECEIPT OF IRON ORE AT A SIDING**

TRAIN TYPE	UNIT TRAIN ALTERNATIVES			RANDOM CARS			
	I	II	III	WAGON TIPLERS		MANUAL or WAGON SHAKERS	
DUMPING MODE	BOTTOM DUMP	TOP DUMP	SIDE DUMP (SPECIAL CASE)	TOP DUMP		BOTTOM DUMP	
CAR TYPE	HOPPER WITH AUTO DOORS FOR RAPID DISCHARGE	GONDOLA WITH SWIVEL COUPLERS		HOPPER WITH MANUAL DOORS		HOPPER WITH MANUAL DOORS	
DUMPING METHOD	TRESLE OR LONG HOPPER	ROTORY DUMPER		ROTORY DUMPER		TURNOVER OR HIGH LIFT DUMPER	TRACK HOPPER
TYPE OF DUMPER	NOT REQUIRED	`O` RING		`C` FRAME	`O` RING	LIFTING FRAME	NOT REQUIRED
TYPICAL CAR INDEXING	LOCOMOTIVE	AUTOMATIC POSITIONER		AUTOMATIC POSITIONER	AUTOMATIC POSITIONER	CAR SPOTTER	CAR SPOTTER
RELATIVE DISCHARGE RATES	<b>EXTREMELY HIGH</b> 100 car train can be emptied in 20 to 30 minutes	<b>VERY HIGH</b> Lower Threshold 4 million tonnes per year		<b>HIGH</b> Car dumping rate of 30 cars / hour	<b>MEDIUM</b>	<b>LOW</b>	<b>LOW</b> 10-12 cars per hour with a single car receiving hopper 650-700 tph hour
RELATIVE DISCHARGE RATES	Best for Short Haul High Tonnage	Best for long haul High Tonnage		`C` Frame provides better positioning for random cars	Can include provision for bottom dump	Minimum Foundation requirements	Labour intensive best for low tonnage

We need to select type of wagons and type of unloading system for receiving iron ore.

Nominal throughput (ore and pellets per year: 3 million T/year in 250 days Average: 12,000 T/day or four rakes per day.

The terminal will also load coal in rail wagons.

Nominal Throughput (coal) per year: 3 million Tonnes in 250 days Average: 12,000 T/day or five rakes a day.