

## 1. An update of the Ship Breaking industry in India

Ship breaking continues to be an important ancillary industry of the shipping sector for India. In India, more than 90% of ship breaking activities are undertaken in Alang-Sosiya Ship Recycling Yards at Alang in Gujarat.

Following table provides yearly trend of volumes handled at Indian and Alang respectively.

Table 1: Total ships recycled in India

Year	No. of ships	Tonnage in million DWT	Change YoY (%)
Jan to Dec 2013	341	11.59	
Jan to Dec 2014	292	9.26	-20.10%
Jan to Dec 2015	188	7.86	-15.12%
Jan to Dec 2016	317	12.30	56.49%
Jan to Dec 2017	230	11.12	-9.59%
Jan to Dec 2018	258	10.34	-6.98%

Source: ISL Shipping Statistics and Market Review

Table 2: Ship recycling volumes at Alang

Year	No. of ships	Lightship Displacement Tonnage (LDT) in million metric tonnes	Change YoY (%) (in terms of LDT)
2013	298	3.05	
2014	275	2.49	-18%
2015	249	2.43	-2%
2016	259	2.76	14%
2017	253	2.43	-12%
2018	258	2.12	-13%

Source: Gujarat Maritime Board (GMB), Ship Recycling Industries Association (India)

## 2. Overview of steel demand and supply in India

From reports available, during the financial year 2017-18, steel production in India grew by 3.1% to 105 million tonnes and consumption increased by 7.9% to 90.7 million tonnes. During the same period Indian steel imports rose by 15% to 8.4 million tonnes.

Thus it proved to be an year of robust demand and a good price for second hand steel are the major factors contributing to the performance of ship breaking industry. Ships are sold for recycling either directly to the ship recycling yard or through a cash buyer. As the figures would suggest, the year 2017-18 didn't get impacted with the demonetization drive carried out by the government.

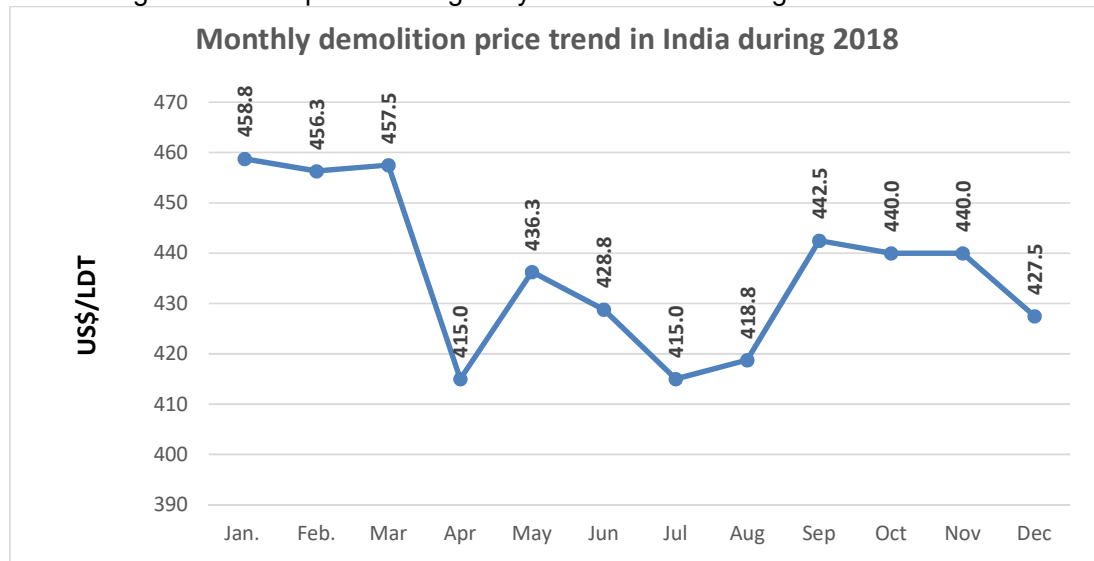
Movement of demolition prices in India.

In 2018, average demolition prices in India grew by 19.2% to USD 436.38 per LDT from 366.08 in the previous year.

### Average demolition prices in India

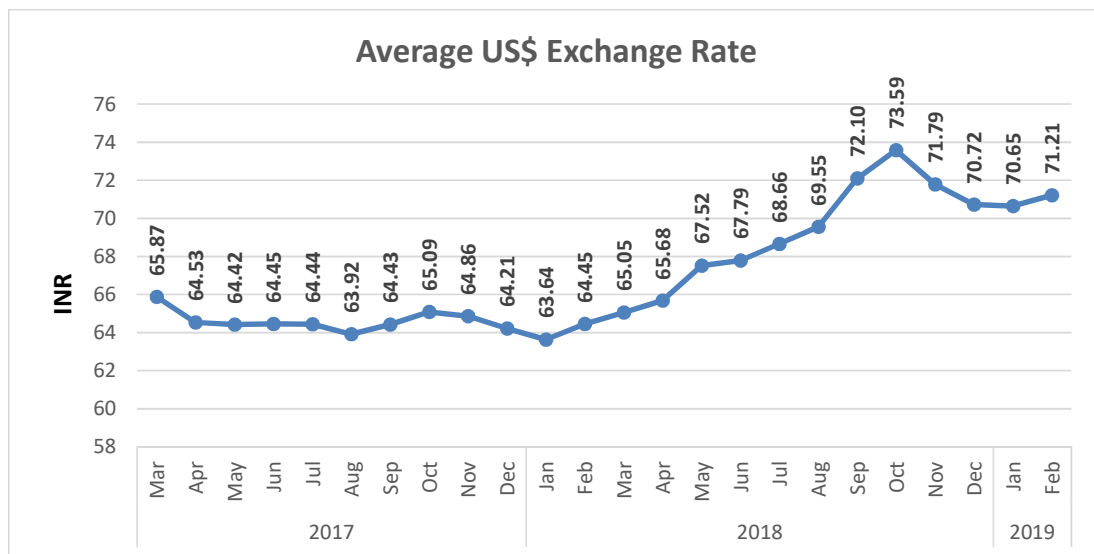
Year	Average demolition price (USD per LDT)	Change YoY (%)
2013	412.4	-3.08%
2014	464.4	12.61%
2015	338.3	-27.15%
2016	272.7	-19.39%
2017	366.1	34.25%
2018	436.4	19.20%

The average demolition prices during the year showed following trend.



Source: ISL Shipping Statistics and Market Review

During the period the exchange rate for USD to Indian Rupees is reflected in below graph.



### 3. Training activities

Gujarat Maritime Board (GMB) has developed a Safety Training and Labour Welfare Institute at Alang, where every person related to any type of work in Alang yard is given safety training by the qualified safety officers of GMB and only after that the worker becomes eligible for employment in the Yard. Following are the training courses conducted by GMB for training and safety of workers:

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Details of various training programmes conducted by GMB at Alang

Sr. No.	Training courses	Target group	Duration (days)
Regular training			
1	Basic safety training	All workers	3
2	Gas cutter safety training	Gas cutters	2
3	Basic firefighting training	Firemen	2
4	Safe removal of hazardous waste	All workers	2
Special training			
1	Safety training	Safety Officer (S.O.)/Safety Supervisor (S.S.)/Manager	1
2	Disaster management training	S.O./S.S./Manager	1
3	Personal protective equipment training	S.O./S.S./Manager	1
4	Training on safety regulations	S.O./S.S./Manager	1
5	Seminar on LPG	S.O./S.S./Manager	1
6	Seminar on respiration personal protective equipment	S.O./S.S./Manager	1
7	Seminar on first aid training	S.O./S.S./Manager	1
8	Crane drivers' training	Crane drivers	2
9	Seminar on wire rope	S.O./S.S./crane driver	1
10	Watch and word training	Watchmen	1
11	Flotilla staff training	GMB staff	2

Source: GMB

The industrial association SRIA also helped develop and conduct training programs for industry people. Summary of same is provided in below:

- Training for "Safe Operation of Winch and Crane."
- Capsule training program on "Safe Handling of Engine Room."
- Mock Drill exercise on "Fire at Alang Ship Recycling Yard" by NMDC organized by SRIA.
- Seminar for Handling of Cryogenic tank and usage of Liquid Oxygen.
- A workshop was held for technical discussion and demonstration on a new breakthrough technology "Laser Induced Breakdown Spectrometry (LIBS)."
- Pilot Safety Training program at Alang-Sosiya Ship Recycling Yard.
- Training of safe dismantling of various types of tankers along with case study of fire incident.

Special workers are trained for handling of hazardous waste like asbestos.

- Labor unions have also initiated Training activities for its members e.g.

Safety seminar for safety officers and supervisors of various plots organized by Alang- Sosiya Ship Recycling General Workers Association (ASSRGWA) in coordination with GMB.

New training centre is being built for members of the ASSRGWA.

#### **4. Reporting duty or mechanism of state government to monitor/order improvement by local law-**

Following table provides information on SOPs laid out at local level to ensure compliance and safe operations.

##### On pre-arrival of ship (Ship waiting off Alang-Sosiya)

- Inspection by Custom Department on board.
- Desk review by Gujarat Pollution Control Board (GPCB), Atomic Energy Regulatory Board (AERB), surveyor for Inventory of Hazardous Material (IHM) part II and GMB.

##### On arrival of ship

- Inspection by GMB prior to oil removal (safety readiness).
- Inspection by GPCB during oil removal operations - e.g. all pipes are opened for visual inspection (pollution prevention).
- Inspection by GPCB for decontamination certificate.
- Inspection by GMB – e.g. safe entry gas free/hot entrance control (Recycling yard safety audit).
- Specific Cutting permission is issued by GMB.

##### Cutting operations

- Inspections by GPCB.
- Inspections by GMB.
- Inspection by Directorate of Industrial Safety and Health (DISH).

##### Closing of the dismantling operations

- Inspection and certification by GMB.

##### Regular monitoring

- Safety Audit is conducted jointly by GMB and SRIA.
- GMB and GPCB monitor the safety standards on regular basis.

## 5. Welfare activities

Welfare activities by GMB and SRIA for workers at Alang ship recycling yard

### Medical

- Every month medical camp is organized for workers and their families by GMB.
- GMB provides financial assistance to the local hospital run by Indian Red Cross Society
- Full fledged hospital with 30 bed was constructed by GMB and to be made operational shortly by Employee State Insurance Corporation (ESIC)
- Fully equipped mobile hospital to handle emergencies, and free medical check-up for workers and their family is provided by SRIA.
- Health awareness camps are organized on regular basis by SRIA.

### Accommodation

- Development of Labour Housing Project at Alang Ship Breaking Yard.
- GMB has completed a project for providing dormitory type housing facilities for the 1000 labours as a phase-I development at a cost of Rs.18.36 crores. 201 labours have applied for accommodation.
- The labour colony under phase-I will have facilities like - Canteen, Office, shops and internal roads along with accommodation including basic requirement like- water supply, sanitation, electrification etc.
- Stand-posts for potable water to labours working in the Alang & Sosiya yard have been provided.

### Sanitation

- Total 7 number of sanitation units at different places have been constructed for labours working in the ship break yard.

### Social Security

- Social security schemes such as Employees' Provident Fund (EPF) and Employees' State Insurance Scheme (ESIC) are mandatory for all workers of Alang Ship Breaking Yard.
- Under ESIC health insurance scheme, contributions are raised from employees and their employers as a fixed percent of wages.
- The State government, as per provisions of the Act, contribute 1/8th of the expenditure of medical benefit with a per capita ceiling of 1500 INR per insured person per annum.
- EPF scheme is under the administrative control of Indian Ministry of Labour and Employment.
- The benefits for the employees are similar to a pension scheme and allows partial withdrawals for specific expenses.

## 6. Accidents

Number of fatal and non-fatal accidents occurred at Alang ship breaking yards

Year	No. of fatal accidents	No. of non-fatal accidents	Total no. of accidents/casualties
FY12	4	0	4
FY13	16	7	23
FY14	11	8	19
FY15	13	12	25
FY16	5	0	5
January 2017 to August 2018	15	8	23

Source: Ship Recycling Industries Association (India), ECSA fact finding report on Alang-Sosiya SRY 2016

## 7. Certification status of ship recycling yards at Alang ship recycling yard

Alang the main demolition centre for global shipping has shown exemplary progress in adopting best practices and quality standard as shown in the below table which summarizes the certification under Quality standard and also HKC standard.

Certification status of yards at Alang updated till date							
Status	ISO Certification Standard				HKC COMPLIANCE		
	9000	14000	18000	30000	SOC by NK	SOC by RINA	SOC by IRS
Completed	90	92	91	85	24	52	10
Under Process	1	1	1	1	10	4	1

Source: Ship Recycling Industries Association (India)

To summarize the Indian shipbreaking industry is poised for embracing HKKG convention in graceful manner. The stakeholders involved are pursuing for an early tabling of the bill in parliament which is pending internal approval process. INSA has had interactive meeting with the Administration as well as SRIA who have been proactive on their part. The Law Ministry independently reviews draft legislation and seek clarification from the respective departments/Ministry before giving nod for further process.

We shall continue to follow up and keep you posted.

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