GOVERNMENT OF INDIA
MINISTRY OF STEEL

RAJYA SABHA
UNSTARRED QUESTION NO. 478
FOR ANSWER ON 24/07/2023

PRODUCTION OF LIQUID MEDICAL OXYGEN (LMO) IN THE COUNTRY

478. DR. KANIMOZHI NVN SOMU:

Will the Minister of STEEL be pleased to state:

(a) the details of total capacity of public sector and private sector steel companies in production of oxygen especially Liquid Medical Oxygen (LMO) in the country during the last five years;

(b) the measures taken to increase production of LMO in the country in general as well as specifically by public sector and also technical and other policy interventions brought to ease growing demand of LMO; and

(c) the details of total increase in capacity production of oxygen by Oxygen Generator Plants in hospitals in country during the COVID-19 pandemic years?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF STEEL (SHRI FAGGAN SINGH KULASTE)

(a) The details of Liquid Medical Oxygen (LMO) production capacity of public and private sector steel companies are given at **Annexure-I.**

(b) The measures taken to increase production and ease growing demand of LMO in the country include the following:-

i. Increase production of LMO by reducing production of liquid Nitrogen and Argon by steel companies.
ii. Maintain 0.5 day safety stock in the storage tanks instead of 2 days safety stock.
iii. Liquid oxygen manufacturers were advised to stop the supply of liquid medical oxygen to industry except for selective essential goods manufacturing industries during peak available liquid oxygen for medical purposes.
iv. Sanction of new Pressure Swing Absorption (PSA) plants by both, Central and State Governments.
v. A total of 4,16,857 Medical Oxygen Cylinders and 113186 Oxygen Concentrators were provided to the States.

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vi. Further, for quick evacuation of liquid oxygen from storage tanks of manufacturers and speedy delivery to the end users (hospitals/oxygen cylinder filling plants):-

(a) Cryogenic tanker owners were permitted to convert their existing cryogenic tankers used for transporting liquid Argon / Nitrogen tankers for transporting liquid oxygen.
(b) Statutory exemptions were provided to the cryogenic tanker owners.
(c) ISO tank containers were permitted for multi modal transport of liquid oxygen within the country.

(c) Pressure Swing Absorption (PSA) plants established for enabling self-sufficiency in generation of oxygen for hospitals' needs and thereby reduce the burden on the medical oxygen supply grid across the country. A total of 4133 PSA plants have been commissioned in the country. Government of India supported States / Union Territories (UTs) by setting up and operationalizing 1225 PSA Plants under PM-CARES. The details of PSA plants commissioned across the country are as follows:-

Source	**No. of Commissioned PSA plants**	**Commissioned Oxygen Capacity (in MT)**
PM-CARES	1225	1929
Central Government PSUs	283	356
Foreign Aid	52	28
State / CSR initiatives	2573	2496
Total	**4133**	**4809**

[Source: Ministry of Health and Family Welfare]

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Annexure-I

LMO Production Capacity of Public and Private Sector Steel Companies (as per the latest available information)

Steel Plants	LMO Production capacity (in Metric Ton)
Steel Authority of India Limited(SAIL)	750
Rashtriya Ispat Nigam Limited (RINL)	130
TATA Jamshedpur Linde	453
Tata Jamshedpur Airwater	150
Tata Kalinganagar	219
Tata BSL	244
JSL Hisar	9.5
JSL Jajpur	52
AMNS Hazira (INOX)	230
AMNS Hazira ASU	10
JSW Bellary, Belloxy	106
JSW Bellary, Linde	130
JSW Bellary, Airwater	100
JSW Bellary, IGPL	130
JSW, Dolvi	304
JSW, Salem	17
JSPL, Angul	100
Vednata ESL, Bokaro	17
JSW BPSL, Jharsuguda	25
Kalyani Steel, Hospet	304
Total	**3480.5**

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