

- Chartered Engineers &
- Govt. Registered Valuers for All Assets & Vehicles
- Techno-Economic-Viability-Studies Consultants
- Stock-Audit

M/s Emcure Pharmaceuticals Ltd.
Valuation
of
Plant & Machinery

Name of unit	M/s Emcure Pharmaceuticals Ltd.
Locations	Plot P-2 & part of P-1, Rajiv Gandhi I.T.-B.T. Park Phase-II, MIDC, Hinjawadi
Date of Visit	7 th July 2020
Purpose of Visit:-	Captioned valuation is undertaken on request received from the Company for the purpose of collateral security.
Management:-	M/s Emcure Pharmaceuticals Ltd. is in the business of manufacture of pharmaceutical products i.e. tablets & capsule formulations for last @ 35 years since 1985. Head of Departments for Production & Quality Control/Assurance are technically qualified persons. Plant is located in I.T.-B.T. Park, Hinjawadi - MIDC, Phase – II, Pune.
Products	Company is engaged in manufacturing pharmaceutical products, and formulations. Company has well established R & D laboratories with requisite equipment for Quality Control/Assurance purpose. Instruments are calibrated at required frequency intervals. Following plants working in the above premises are assessed. 1. EOU 2. R & D API 3. R & d CGMP 4. A.H.P.(Pfizer) 5. Oncology

	<p>6. SVP SPD</p> <p>Plants (1) to (5) are located in Plot P-2, and plant (6) is located in part of plot P-1.</p> <ol style="list-style-type: none"> 1. E.O.U. 2. SVP SPD 3. Oncology 4. Propofol <p>Capital WIP was under progress under following assets categories</p> <ol style="list-style-type: none"> 1. E.O.U. 2. Oncology 3. Propofol <p>Apart from main production facility i.e. plant & machinery, these plants are equipped with facilities like electrical installation, lab equipment, material handling equipment, AHUs, & utilities like transformer, boiler, DG Set, Air Compressors, etc. They have Effluent Treatment Plant in operation.</p> <p>Most of the Plant, machinery & equipment was physically verified with reference to machinery lists enclosed, and was found in working condition or under routine cleaning/maintenance.</p>
Valuation	<p>Plant & Machinery of each plant is classified broadly into following categories.</p> <ul style="list-style-type: none"> - Plant & Machinery. (Main production machinery) - Electrical Installation. - Air Handling Units (AHUs) / Systems. - Equipment & Loose Tools. - ETP (which is common to all plants) - Material Handling Equipment. - Pollution Control equipment - Spare & Change Parts (incl. dies & moulds). - Utilities, & D. G. Sets. - Lab Equipment



Fair Market Value is worked out as follows.

Based on the data provided by the Company, gross block is classified into three classes namely 0 to 3.5 years, 3.5 to 10 years, and beyond 10 years.

Considering average economic service life as 15 years for plant & machinery, weighted average Depreciation –cum- obsolescence Factor is worked out

For R & D & Lab equipment, economic service life of as 10 years is considered.

Salvage Value at the end of the average life is considered at 10 %.

For both p & m and R & D and lab equipment.

Gross Block of each class of above items is then multiplied by following factors, i.e. Depreciation-cum- obsolescence Factor, & Price Escalation Factor to arrive at Depreciated Replacement Cost (D.R.C.) for plant & machinery and R & D and Lab equipment.

Capital WIP is underway on following assets with a gross block of

Rs 106.80 Crs

- 1.EOU
2. Oncology
3. Propofol

However to distinguish it from commissioned machinery in production/use, a component of @ 15 % is set aside for balance work and erection & commissioning.

Hence Capital WIP is assessed at Rs 90.78 Crs

Detailed working of DRC is given in the annexure enclosed.

Total D.R.C. of all the plants combined has been assessed as

Rs 535.75 Crs.

Fair Market Value (F.M.V.) is arrived by loading D.R.C. for ready accruals at 5 %.

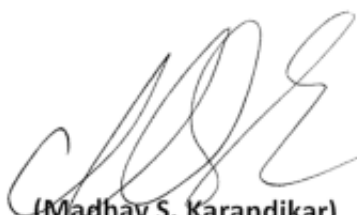
$F.M.V. = Rs\ 535.75\ Crs \times 1.05 = Rs\ 562.54\ Crs..$

Thus **Fair Market Value** for all the plants at Hinjawadi, is assessed as **Rs 562.54 Crs.**



	<p>Fair Market Value is applicable only when the set of machinery is considered to be used by a single customer. List of machinery item – wise is shown in the enclosed sheets.</p> <p>Realisable & Distress values are assessed @ 70% and 40% of fair market value.</p> <p>This valuation is subject to disclaimer enclosed. Separate legal opinion be sought on ownership of the assets, if required.</p>

For Madhav Consultants




(Madhav S. Karandikar)
LME, MIE, MIIE, CAIIB, MBA (Fin)
Chartered Engineer &
Govt.Regd.Valuer
Reg. No.677/2003-04

Encl :- As above.

M/S Emcure Pharmaceuticals Ltd.

Valuation of Plant, Machinery, Equipment

at Plot Nos. P-1+P-2, Rajiv Gandhi I.T.B.T. Park, Phase -II, MIDC - Hinjawadi, Pune.

(Date of site visit - 07.07.2020)

Gross Block as given by the Company:-

(Amt in Rs)

Sr No	Particulars	Upto 2010	2011 - 16	2017- 30.06.20
A	Age	> 10 yrs	3.25 - 10	0-3.25
1	Plant & M/c	93,77,37,357	1,36,01,17,929.00	1,45,35,72,023
2	Elect. Installation	17,72,66,219	10,76,40,530.00	8,81,98,846
3	AHU	30,42,37,835	15,04,00,415.00	16,11,82,423
4	Equipment & loose tools	5,76,25,938	4,02,69,606.00	60,23,368
5	ETP	1,00,50,817	1,49,24,621.00	4,32,93,347
6	Material Handling	7,17,81,762	10,26,25,275.00	1,58,04,981
7	Pollution Control Equipment	35,95,320	18,54,698.00	36,02,497
8	Spares & Change parts	7,68,86,490	13,54,53,784.00	16,33,91,490
9	Utilities	20,15,10,964	24,34,07,225.00	28,98,96,088
	Total:-	1,84,06,92,701	2,15,66,94,083	2,22,49,65,062
	Amt Rs in Crs	184.07	215.67	222.50
	Grand Total:-	622.24		
	% to Total	29.58	34.66	35.76
	Depreciation Factor:-	0.75	0.40	0.10
	Weighted Depreciation Factor	22.19	13.79	3.50
	Gross Deprn Factor	39.47		
	Hence Depreciation Factor			
	for Machinery is Say:-	0.40		

A-1 Capital WIP

Plant	Gross Block As of 30.06.2020
EOU	23.366
Oncology	23.902
Propofol Plant IV	59.535
Grand Total:-	106.80

Obsolescence factors needs to be applied.

However to distinguish it from commissioned machinery in production/use, a component of @ 15 % is set aside for balance work and erection & commissioning.

Hence value assessed for capital WIP will be Rs 90.78 Crs

B Laboratory Equipments

(Amt in Rs)

Particulars	Upto 2010	2011 - 16	2017- 30.06.20
Lab equipment	15,51,00,944	29,65,69,944.00	11,82,11,556
R & D equipment	13,92,82,199	26,87,31,164.00	4,41,01,904
Total:-	29,43,83,143	56,53,01,108	16,23,13,460
Amt Rs in Crs		56.53	16.23
Sub Total:-		72.76	
% to Total		77.69	22.31
Depreciation Factor	Salvage Val = (29.44 * 0.15) = 4.42	0.40	0.10
Weighted Depreciation Factor	*See Note below	30.91	2.18
Depn Factor for 2011 - 30.06.2020	33.09		
Say:-	0.33		

Considering Obsolescence, Combined Depreciation - cum Obsolescence Factor for 2011 to 30.06.2020 is assessed at **0.33**

***Note:-** For period >2010, salvage value @ 15 % of Gross Block of Rs 29.44 Crs ie Rs **4.42 Crs** is assessed (for breakage / consumables like glassware, sensors, etc., & associated higher obsolescence), and is set aside as Salvage Value & added later to arrive at DRC



1 Price Escalation Factor assessment:-

Source:-

https://www.eaindustry.nic.in/display_data_201112.asp

Wholesale Price Index (WPI)

Yearly Wholesale Price Index

Name of Commodity : Pharmaceutical Machinery

Type : Individual Commodity

Weight : 0.19273

Base Year : 2011-12 = 100

Financial Year	Index
2018-19	123.8
2017-18	119.0
2016-17	115.1
2015-16	111.0
2014-15	106.5
Total:-	575.40
Average Index for 5 years	115.08
Average Index for 5 years = $(115.08 - 100)/5 = 3.016$	
Hence Average Inflation from 2014 -15 to 2018 -19 (5 yrs) - 3.02 %	

2 Cost of Inflation Index

Income Tax Department

Source:-

www.incometaxindia.gov.in

Source:- <https://www.incometaxindia.gov.in/Charts%20%20Tables/Cost-Inflation-Index.htm>

Notified Cost Inflation Index under Section 48, Explanation (V)

As per Notification No. So 3266(E) [No. 63/2019 (F.No. 370142/11/2019-TPL)],
Dated 12-9-2019, following table should be used for the Cost Inflation Index :-

Base Year 2001-02 as 100

Index for FY 2014-15	240
Index for FY2020-21	301
Average Inflation/year	8.71

ie Cost escalated @ 8.71 % pa on St Line Method over the past 7 yrs.

Hence Market Inflation for the past 5 to 7 years as per WPI & Cost inflation Index ranges
from 3.02 % to 8.71 %

3 Actual Market inflation at present is affected by COVID 19 Pandemic & is gauged around 5 %

Considering above 3 indices

Sr No	Type	Index
1	WPI for Pharma Machinery	3.02
2	Cost Inflation Index	8.71
3	Avg Market inflation	5.00

Weighted average of above 3 indices is assessed as 5 %

A DRC for Plant & Machinery (excluding Lab Equipments) is as follows:-

I Price Escalation Factor:-

Summary of all above Indices:-

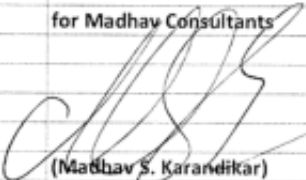
Sr No	Type	Index
1	WPI for Pharma Machinery	3.02
2	Cost Inflation Index	8.71
3	Avg Market inflation	5.00

Hence keeping in view inflation indices of WPI, Cost Inflation Index & Prevailing Market conditions,
Price Escalation Factor is assessed as 5 % i.e. 1.05

II Depreciation factor:-

It is worked out as above 0.40 for gross block of plant & machinery considering 10 % as Salvage Value



	DRC Assessment		
A	DRC for Plant & Machinery:-		
	Hence Depreciated Replacement Cost (DRC) for Plant & Machinery will be		
	= (Total Gross Block * (1 - Depr Factor) * Price Escalation Factor)		
	392.01		
	= Rs 392.01 Crs		
	Rounded to Rs 392.00 Crs		
B	DRC for Lab Equipments is as follows:-		
	Hence Depreciated Replacement Cost (DRC) for Lab Equipments will be		
	= (Total Gross Block * (1 - Depr Factor) * Price Escalation Factor) + Salvage Value for period >2010		
	53.17		
	= Rs 53.17 Crs		
	Rounded to Rs.53.00 Crs		
	Hence DRC of Machinery, capital WIP & Lab Equipments together will be		
	DRC of Plant & Machinery + Value for Capital WIP + DRC of Lab Equipments		
	535.78		
	= Rs 535.78 Crs		
	Say Rs 535.75 Crs		
	for Madhav Consultants		
			
	(Madhav S. Karandikar)		
	LME, MIE, MIIE, CAIIB, MBA(Fin)		
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	Reg. No. 677 / 2003-04		
	