Disclaimer: I have not invested in Ratnamani. This is not a recommendation to Buy, Sell, or Hold. I am not a SEBI registered analyst. I wrote this document to organize my thoughts and deepen my understanding about the company and industry. I am sharing it so that both the readers and I can learn something from this.

Ratnamani Metal Tubes and Pipes ("RTML" or the "Company") is the largest stainless steel (SS) pipes and tubes manufacturer in India and has substantial carbon steel (CS) capacity. Ratnamani is among few global companies with the ability to manufacture an extensive range of SS seamless (highest margin) & welded tubes, which is the focus segment. The CS division can manufacture HSAW, LSAW & ERW pipes. SS products have critical applications and as such are higher margin products, while CS products are more commoditized and there is overcapacity presently.

The facilities are located in three locations in Gujarat: Kutch, Indrad and Chhatral; in addition it has two mobile plants specifically for CS pipes. The total capacity of CS is 350k tons (LSAW: 40k, HSAW: 180k, ERW: 70k and circ seam: 60k) and SS is 28k tons (welded: 20k, seamless: 8k). Due to the nature of the business (smaller pipes implies lower tonnage produced, but they have higher margins), the capacity utilization cannot go beyond ~65%. The current capacity is however is underutilized by a reasonable extent (<50% for both). Ratnamani is setting up additional 20k ton capacity for SS seamless (new range products).

Major end user industries for SS pipes: Critical applications in O&G (including LNG), Petrochemicals, Refineries, Thermal power, Nuclear power. O&G, Refineries and Petrochemicals contribute 50% of this division.

CS pipes: Pipeline projects like O&G transmission, City gas distribution, Potable Water, Power. The current domestic capacity for the same is ~8 million (over supply) and Ratnamani's capacity is 0.35 million.

SS and CS pipes' demand is driven by the end industries' capex and together form 5% to 10% of the total capex outlay.

Customers: Both domestic (>75% of rev) and exports. Regular supplier to Aramco, Dow, Shell, KNPC, L&T, NPCIL, etc.

Competitive Advantage (primarily in SS):

Scale economies in a niche industry: Ratnamani produces made-to-order, complex, low volume SS (& titanium) pipes & tubes, which are indispensable for critical applications in power (thermal & nuclear), refineries, O&G, petrochemicals & other industries. There is no major obsolescence risk. With a capacity of 28k tons (max of 65% utilization), Ratnamani has ~45% market share in the SS tube and pipes industry in India. Dominant position in a niche industry provides a nice competitive advantage.

High capital investment: Currently investing 350-400 cr to expand seamless SS capacity from 8k tons to 28k tons. The high capital investment required is a deterrent to potential competitors.

Long approval period: SS products like instrumentation tubes, heat exchanger tubes and others are extremely critical and their malfunction could result in huge cost: both human and monetary. As such, the approval process is very stringent and is pretty long (can take 5 to 7 years).

Focus on Quality: Ratnamani has high focus on quality and has supplied products to ITER, the experimental nuclear FUSION project built by collaboration between 35 nations in France. Its products are used in BrahMos. It is the only Indian company to obtain approvals from and supply to NPCIL, BARC and other agencies requiring highly specific products. The quality of its products and facilities is comparable to the best in the world currently.

Constant value addition: The management embraces change and has focused on constant value addition (complex products with less competition) which helps in increasing competitive advantage, customer captivity and diversification (of product variety). It has moved from primarily SS products to duplex SS, super duplex SS, titanium, among others, and is among the only few companies in the world and the only company in India in a few categories. It has for ~30 years designed and developed products which have been import substitutes, and in fact exports many products which were previously imported in India. The policy is to continually invest in capacity, increase product range and invest in testing equipments to improve quality.

Focus on customer delight leading to customer stickiness: Ratnamani's credo is to delight the customer by producing quality products at affordable prices and delivering them on time. It introduced the concept of mobile plants (in 2001 for CS pipes). The range of products, focus on quality, timely delivery, value addition & technology, lower costs and efficiency has led to a lot of repeat customers. Ratnamani is a preferred supplier for many of its customers - both domestic and international.

Backward and forward integration: Mother hollow pipes is the major RM for manufacturing. These were previously imported, which led to higher costs and delays. It set up a captive plant for the same (apparently the only one India), which adds to the competitive advantage. Also, it has set up a coating plant and intends to do capex for spooling (forward integration which would supply products which are more finished to customers reducing their commissioning time) as part of value addition and customer delight philosophy.

Promoters - *'As long as the world uses oil, gas and water, you will need pipes and tubes to transport it.'*

Ratnamani is run by the three Sanghvi brothers: Prakash, Jayantilal and Shanti. The promoters own 60.3% and has never fallen below 55%. Two sons of Prakash Sanghvi and a son of Jayantilal Sanghvi have all joined the business

Evolution; domain knowledge: The main promoter Prakash Sanghvi, was initially into low margin metal trading business, from which he deliberately moved to high margin Steel tubes and pipes manufacturing business. Manufacturing niche, critical tubes and pipes has resulted in strong domain knowledge which would be hard to replicate.

Intelligent focus and vision: Focus on right aspects like high complexity SS business (over CS business), value addition, product diversification (growing legs sensibly), backward integration, windmill power (cost reduction) helped the Company. There has been no attempt at diversification.

Strength in adversity: Mgmt composure and focus helped the Company become stronger in adversity: partition in 1988, IPO in 1993, recession, etc. It came out strong after each setback. It doubled revenues and profits from 2011 to 2015, when its customer industries were not performing that well, and competitors were suffering badly.

Conservative aggressive expansion; growth orientation: From 1998 to 2003, when demand was sluggish, the gross block grew from 40cr to 56cr; it then increased to 500cr by 2010! This shows willingness to bet big when they see demand. The only equity dilution done was in 2004 for capex. During the high capex period, the D/E went to a maximum of 1.3x only. There is continuing focus on investment in quality, new products, markets and new generation manufacturing facilities to deepen the moat.

Fast learners: In its attempt at becoming a complete piping solutions provider, it expanded aggressively in the commoditized CS pipe segment from 2002-2009, when it increased from 40k tons to 350k tons. Since then, there has been no increase and there is no intention to increase capacity in this segment. Focus since then has been on SS products which is the core competence.

Insider ownership: Around 0.13% of the Company is held by the independent board members. I believe a decent chunk (~2%) is held by employees (courtesy ESOS). In 2010, when the market cap crashed to a third, both directors and employees exercised ESOPs, indicating faith. Board and employee faith is a positive.

Employee strength: Promoters' regard for employees (2,037 strong) is indicated by the ESOPs given to employees (~5% of shares outstanding, ~76% exercised) and bus service to majority / all workers in the Company (blue collar mainly). The attrition level in at least the senior management level is quite low (as indicated by option disclosure till 2015).

Integrity: While the salaries are high (~10% of PBT on average), it should be remembered that they pay taxes on the same. The taxes paid (by the company), CFO to PAT ratio, lack of debt all indicate clean promoters. Promoter interviews (Unnati and CNBC) and scuttlebutt support this belief.

Family firm: In the CNBC video on the Company, the promoter mentioned his desire to create something for his family members, including in pharma and other ventures. This would most probably be outside Ratnamani and is potentially focus dilutive. Eight members of the Sanghvi family (including promoters) are employed with Ratnamani currently which could potentially irritate professional employees if not managed carefully.

Financials:

Ratnamani's evolution is quite interesting. Under the promoters' able steward ship it evolved from a low margin business which required equity dilution (once in 2005) and repeated debt funding, to a debt free, high margin, self sustaining business which is able to internally fund its growth.

Ratnamani's revenues have grown strongly by 18% CAGR over the last ten years, and PAT by 17% over the same period. Margins have historically remained strong with EBITDA margins above 16% over the last 12 years and average net margins of >9% over the same period. 2016 revenues did not grow despite volume growth due to decline in RM prices.

From 2011 to 2016, the business environment was beset by uncertainties. Revenues and profits for Ratnamani doubled driven by continuous value addition in SS products coupled with competitive advantages of quality, low cost and timely delivery which helped it add more and more orders (Exports & domestic), while competitors were facing headwinds. During this period, when its peers were suffering from high leverage and overcapacity, it increased its gross block by 60% and became net debt free.

The Company has been FCF positive (despite heavy growth capex) in 8 of the last 9 years. It expects to self fund the 350cr-400cr SS seamless capex (for new products not currently manufactured), which will be finished in two phases over 3 to 4 years.

WC intensity is moderate at ~30% of sales over the last 6 years. The Company seems to be lending funds as WC to various corporates (non related) on a yearly basis. There is an amount of ~30cr outstanding wrt this at FYE16.

The returns on equity & capital are strong as indicated below.

Return ratios	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
RoE	29%	51%	58%	49%	27%	25%	21%	23%	23%	20%	21%	17%
pre-tax RoE	45%	70%	85%	74%	40%	37%	25%	28%	31%	28%	28%	23%
RoCE	36%	41%	43%	44%	31%	25%	18%	23%	27%	29%	31%	26%

Outlook: The refinery upgradation (Euro norms), nuclear project in Haryana, LNG facilities & water pipeline indicate there is reasonable visibility in the medium term. Pipes and tubes are easily exportable, and Ratnamani's advantages of high quality products at low cost and delivery on time implies the addressable market is the whole world. Mgmt expects 2017 revenues and margins to be stagnant yoy (RM impact).

Valuation:

DCF: Assuming a discount rate of 10%, PAT as the FCF, 12% growth rate for 10 years and terminal growth rate of 3%, the intrinsic value per share comes out as 1000 per share. At 25% discount, it comes out at 750 per share. The current market price per share is 550 per share.

Reverse DCF: The current market price indicates a 4% growth for the next ten years and 3% terminal growth rate which is low.

Historical multiples: By historical multiple standards the valuation currently is high. From 2007 - 2014, P/E was never above 10 and P/S was never above 1.1. The current multiples are 15.8x and 1.5x, but pertinent to remember that RM prices are low.

Expected return: Assuming 12% growth rate in sales for next ten years, PAT margin of 10% and exit PE of 15, the expected market cap comes out to be 8,010 cr which implies a CAGR of 12% pa.

Competitor comparison

Prakash and Suraj make SS products, while others are CS players. By growing strongly and becoming debt-free in what was evidently a weak period for the industry, Ratnamani became much stronger in the absolute sense, and also relative to its competitors. It is the best placed among its domestic peers to expand during a demand turn (as it is doing).

Company	Mcap (cr)	Revenues (cr)	Rev (5 years)	PAT (5 years)	OPM (%)	PATM (%)	D/E	RoE (5 years)	RoCE
Ratnamani	2,570	1,719	16.0%	14.4%	16.6%	9.0%	0.0x	>20%	26.0%
Welspun	2,154	8,320	0.7%	-19.0%	10.0%	2.7%	1.1x	<8%	6.0%
Prakash steelage	38	1,085	20.0%	-4.0%	7.3%	1.3%	1.3x	<13%	13.0%
Suraj Stainless	NA	258	7.0%	6.0%	10.7%	2.7%	1.4x	<10%	4.8%
Jindal Saw	1,578	8,325	3.2%	-20.0%	10.2%	0.3%	2.3x	<8%	4.0%
Maharashtra Seamless	1,422	1,019	-10.4%	-34.0%	3.2%	3.8%	0.0x	<8%	3.0%

Risks:

- Capex dependent: Revenues are capex cycle dependent, which if does not pan out in the long-term can be problematic.
- Overdependence on O&G: This sector forms ~40% of revenues which is a risk.
- Dependence on new orders: 85% is on new orders, replacement orders is remaining. This led to constant focus on technology and innovation so that the best can be offered to clients.
- Succession risk: In 1989, there was an (amicable) split in the Sanghvi family with the cousins taking the then profitable metal trading business and the current promoters taking over the manufacturers. There are at present 5 second generation Sanghvi members in the Company, which could potentially increase succession planning risks and maybe risk irritating the professionals.

Conclusion and Checklist:

Ratnamani is a very well run business run by capable owner operators with very good business profile. Risks include dependence on capex cycle and O&G industry. Valuation is not mouth watering though there is undervaluation.

Checklist	Answer
Category of investment	Long-term
Is the business simple and easy to understand?	Yes
Is there a competitive advantage for the business?	Yes
Is there a risk of technological obsolescence?	No
Is there a runway available for the business?	Moderate
How would you categorize the management quality?	OO1 / OO2
Is the Company overleveraged?	No
Does the company's products result in social harm?	No
Is the company available at a reasonable valuation?	Fair
How is the industry where the Company is operating currently perceived (Optimistic / Pessimistic / I don't know)?	Fair
How is the general outlook for stock investing in general (as above)?	Optimistic
Given the general outlook for the industry and stock investing, coupled with the opportunities in the portfolio, would I still invest in the business?	Undecided
If Yes, how much would you allocate to the business?	NA