

Figure 6. No side trails left at skimming.

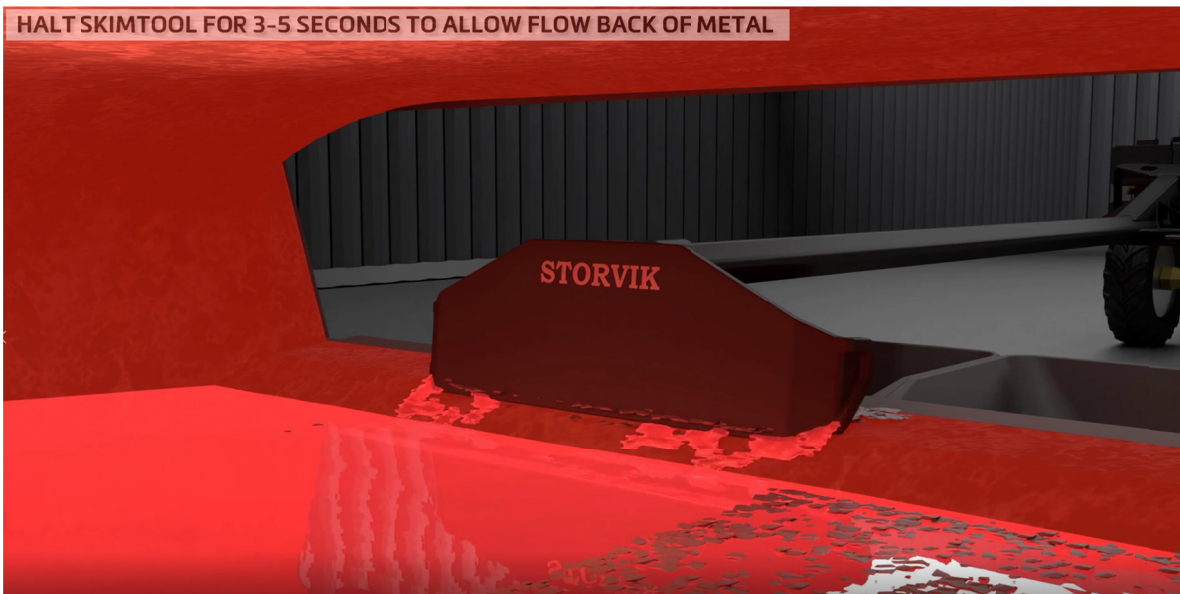


Figure 7. Flow back of metal from dross.

8. Product Line-Up Today

We soon found out, when we had designed the basic shapes and reached the optimal effects of each tool, that we would need to offer several variations to of each tool to accommodate the majority of our customers, due to the differences in equipment used and also due to various furnace sizes and shapes, our line-up now consists of 13 different tools which we believe can accommodate most casthouse furnaces, both for primary and secondary aluminium producers (Figures 8 – 13).



Figure 8. Skimming process with lift truck.

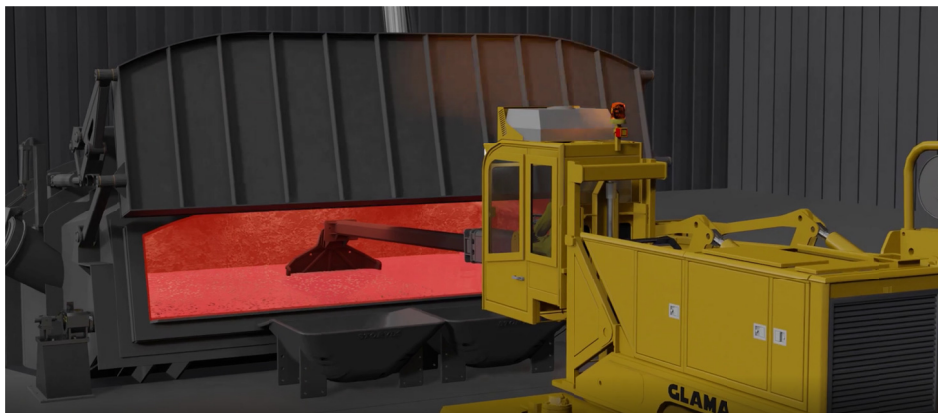


Figure 9. Skimming process GLAMA (FTV).



Figure 10. Skimming process with wheel loader.



Figure 11. Stirring process with wheel loader.



Figure 12. Stirring process with wheel loader.

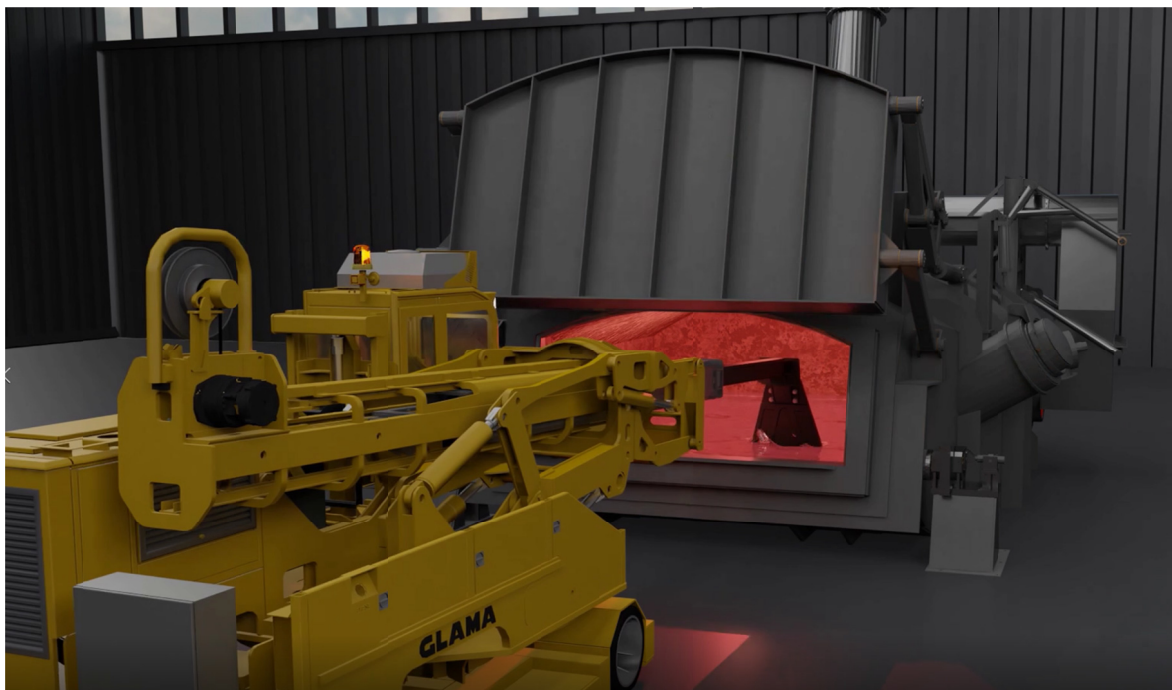


Figure 13. Stirring process with GLAMA (FTV).

9. Conclusions

Customers, which have fully implemented Storvik's furnace tending tools and best practices, have documented the following:

- Less tooling cost
- Shorter preparation time of furnaces
- Less dross formation
- Less metal in dross
- Energy savings
- No iron contamination from tools*

*Iron contamination from regular mild steel furnace tending tools can be a big problem for some producers as some alloys need to have extremely low iron content, which can be hard to achieve, especially for the aluminium recycling industry which in many cases is already fighting with iron contaminated scrap, too high iron content can also occur in the primary sector in case of unsteady pots in the pot rooms (often happens after power outage or other electrical interference).

10. Reference

1. O. Manfredi, W. Wuth and I Bohlinger, Characterizing the physical and chemical properties of aluminum dross, *JOM*, November 1997, 48-51.