Always bring VALUES to STEELMAKERS beyond their expectations as one refractories & metallurgy Manufacturer and Innovator.
As one veteran figure in steelmaking refractory and metallurgical industry, Consteel always win the trust of our customers not simply due to our 35 years affluent proficiency, result-oriented service and reliable products, but because of our deep root cause -- we consistently treat ourselves as only the guide for our protagonists - the customers of us, which eventually shape the management style and culture feature of Consteel and, it define the impression of each Consteel employee in front of our customers, and determine the reaction of our coworkers in case of troubles that seemingly - t uncorrelated with Consteel’s business scope, and finally it differentiate us from massive peers.

Consteel provide customers with

- **Optimal solution**
  Provide you with tailo-red steelmaking refrac-tory solution on basis of optimized techniqu-es and cost-effectiveness.

- **One-stop refractory products**
  Consteel are capable in sup-porting your steelmaking proc-ess with high-level and full-r-range refractories covering s-haped, unshaped and massi-ve metallurgical agents.

- **Veteran installation expertise**
  Consteel’s more than 30years installation expertise enable us to promise and achieve the top quality refractory installa-tion which ensure the lowest lining operation cost.

- **Enchanting added-value**
  Once deep mutual-trust is established, we are c-onfident to provide our customers with various added-value service beyond their expectation.

Elaboration of Consteel’s capability

**DESIGN**
In addition to product selection considerations, there are con-siderable benefits to be obtaine-d by optimizing the design asp-ects of the steelmaking refract-ory lining. Overall, the selectio-n of products and lining designs should
1), Meet the metallurgical targe-ts set by the end user, in order to prevent the chosen lining being a potential containment in the steelmaking process, and
2), Enhance the longevity of aligned refractories to save the cost of smelting processes.

**PRODUCT PORTFOLIO**
Our full-range product portfolio for steelmaking ranges from va-rious shaped refractories like li-ning bricks, EBT sets, purging s-et, tapping sets, and the monol-iithics including the ramming — ass, repairing mix, mortar,gun-ning mix, plastic filling mix, etc, and the metallurgical addictive ,agents, ingredients and catal-yst.

**INSTALLATION**
As per introduction previously, Consteel are capable in carry-ing out high-quality installation.

and projects supervision services by our know-how and optimal techniq-ues. This capability guarantee the premium refractory lining performa-nce for our various steelmaker cust-o-mers. Besides, we would offer permanent on-site refractory services in cluding regular and predictive maint-enance to ensure the stable & secure performance revolves around not o-nly the products but also the install-ation itself.

**VALUE-ADDED SERVICES**
We provide value-added services r-range widely from consultation, pla-ning, delivery scheduling, supervi-sion, process diagnosis, site man-agement and training.
APPLICATION

EBT-Eccentric bottom tapping leads to slag-free tapping, shorter tap-to-tap times. It also reduces refractory and electrode consumption, and improves ladle life. And back to the EBT set itself, the quality of Consteel CFEE series products depends not only on the premium raw materials adoption, stable & sound processing, but also the tailored design based on various changing surrounding and application parameters and many other specific features.

DESIGN & CONFIGURATION SPECIFICATIONS

Consteel’s EBT set will be designed according to the volume of EAF furnace not only rest with the structure but also the devised steel smelting productivity, the working severe level, the smelting process features, etc. And therefore, after the delicate design and detail-oriented consideration, Consteel’s EBT set can endure the more harsh working environment and have a longer lifetime usage which produce the lower cost according to our TCO analysis.

COMPONENTS

Consteel’s CFEE series EBT set is comprised by
1. special shaped bricks including the surround bricks, sleeve bricks and end blocks, and
2. high thermal shock resistant monolithic as specialized hot filling mix and repairing mix.

<table>
<thead>
<tr>
<th>Images</th>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Three shaped fitting bricks for EBT set" /></td>
<td>CFEER series rectangular surround bricks</td>
<td>To attach the sleeve bricks with EAF hearth mainbody</td>
</tr>
<tr>
<td></td>
<td>CFEES series inner sleeve bricks</td>
<td>To withstand the corrosion, erosion and thermal shock of molten steel with direct touch</td>
</tr>
<tr>
<td></td>
<td>CFEEE series end blocks</td>
<td>To support the above two bricks from the bottom</td>
</tr>
</tbody>
</table>
These bricks are made with high-pressure molding and have features of high intensity, strong resistance to slag, excellent thermal shock resistance, and high refractoriness. For the compositions for shaped fittings and the unshaped filling mix, please refer to the sheet as following.

<table>
<thead>
<tr>
<th>Consteel SN</th>
<th>Chemical composition analysis</th>
<th>Carbon content</th>
<th>Physical properties</th>
<th>Anti-oxidant</th>
<th>Grade</th>
<th>Applicable zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MgO %</td>
<td>SiC %</td>
<td>Al₂O₃ %</td>
<td>Fe₂O₃ %</td>
<td>SiO₂ %</td>
<td>C %</td>
</tr>
<tr>
<td>CFEER-Y12-3S</td>
<td>97.5</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>0.8</td>
<td>12</td>
</tr>
<tr>
<td>CFEER-Y14-3S</td>
<td>98.1</td>
<td>1.5</td>
<td>1</td>
<td>0.6</td>
<td>0.5</td>
<td>14</td>
</tr>
<tr>
<td>CFEES-N10-3S</td>
<td>97</td>
<td>-</td>
<td>1</td>
<td>0.8</td>
<td>0.6</td>
<td>10</td>
</tr>
<tr>
<td>CFEES-Y10-3S</td>
<td>-</td>
<td>8</td>
<td>66</td>
<td>0.5</td>
<td>0.4</td>
<td>10</td>
</tr>
<tr>
<td>CFEES-Y12-3P</td>
<td>-</td>
<td>10</td>
<td>66</td>
<td>0.6</td>
<td>0.5</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: The particular bricks configuration will be conducted by our detail-oriented engineers according to the various parameters like the EAF type, duration time, molten iron alloy compositions and customer’s requirements, etc.
EBT SET PROCESS FLOW-CHART

Raw material preparation → Crushing & grinding → Raw material screening → Ingredients dosing → Ingredients mixing

Appearance Inspection → Drying process → Tooling press shaping → Ingredients mixing

Sampling tests → S.N. stamping → Pallets packaging → Delivery

PLANT REAL PHOTOS OF CONSTEEL

ZHEJIANG CONSTEEL METALLURGICAL TECHNOLOGY CO., LTD
Add: Yueming industrial park, Changxing, Zhejiang province, China
Tel: +86-574-88018091 +86-18606618005
Website: www.consteel.net
Email: Jason@consteel.net