

MANUFACTURER'S NAME & ADDRESS: LTV Steel Company P.O. Box 6778 Cleveland, Ohio 44101
 NAME & TITLE OF INDIVIDUAL SUPPLYING INFORMATION: T.M. Civic Manager Environmental Health
 AREA CODE & PHONE NO: (216) 822-5242
 AREA CODE & LTV EMERGENCY PHONE NO.: (216) 822-5000
 PRODUCT NAME/TRADE NAME: Hot/Cold Rolled Stainless Steel - Bar & Wire
 CHEMICAL NAME & SYNONYMS: Example: AISI 301, 303 Se*, 347**, PH 17-4***, CrMoV****

NOTE: Ingredients and % wt. vary according to order specification

| RECOMMENDED USE | CAS# | % wt. | Permissible Exposure Limits | Units |
|-----------------------|-----------|-----------------|--------------------------------------|-----------------------|
| Base Metal: Iron | 1309-37-1 | 39-81 | PEL as Oxide Fume | 10 mg/M ³ |
| Alloys: | | | | |
| Carbon | 7440-44-0 | .01 - .25 | None Listed | |
| Manganese | 7439-96-5 | 2.0 max. | PEL(c) as Manganese | 5 mg/M ³ |
| Phosphorus | 7723-14-0 | .001 - .2 | PEL as Phosphorus (Yellow) | .1 mg/M ³ |
| Sulfur | 7704-34-9 | .001 - .15 | PEL as Sulfur Dioxide | 13 mg/M ³ |
| Silicon | 7740-21-3 | 1.0 max. | None Listed | |
| Chromium | 7740-47-3 | 12 - 26 | PEL - Soluble Chromic/Chromous Salts | .5 mg/M ³ |
| | | | - Chrome & Insoluble Salts | 1 mg/M ³ |
| Nickel | 7740-02-0 | 6 - 22 | PEL as Nickel | 1 mg/M ³ |
| * Selenium | 7782-49-2 | .15 - .30 | PEL as Selenium | .2 mg/M ³ |
| ** Columbium/Tantalum | 7440-25-7 | 10 x Carbon %wt | PEL as Tantalum | 5.0 mg/M ³ |
| *** Copper | 7440-50-8 | .04 - 4 | PEL as Copper | .2 mg/M ³ |
| **** Vanadium | 7440-6-22 | .07 - .3 | PEL as Vanadium Pentoxide-Dust | .5 mg/M ³ |
| | | | -Fume | .1 mg/M ³ |

COATINGS: Optional: Petroleum oil, dry lube (lime or borax).
 Note: Use gloves when handling to prevent skin irritation.

1. FIRST AID: In case of excessive exposure, remove to fresh air, administer oxygen, and seek physician's assistance.

2. NOTES TO PHYSICIAN:

1. MATERIAL IDENTITY

2. CHEMICAL INGREDIENTS

3. PHYSICAL PROPERTIES

4. TOXICITY

5. RECOMMENDED PROTECTIVE EQUIPMENT

6. REGULATORY INFORMATION

7. OTHER INFORMATION

8. STORAGE AND HANDLING

9. TRANSPORTATION

10. DISPOSAL

11. REVISIONS

12. DATE OF REVISION

13. PREPARED BY

14. APPROVED BY

15. DATE OF APPROVAL

16. REVISIONS

17. DATE OF REVISION

18. PREPARED BY

19. APPROVED BY

20. DATE OF APPROVAL

21. REVISIONS

22. DATE OF REVISION

23. PREPARED BY

24. APPROVED BY

25. DATE OF APPROVAL

26. REVISIONS

27. DATE OF REVISION

28. PREPARED BY

29. APPROVED BY

30. DATE OF APPROVAL

31. REVISIONS

32. DATE OF REVISION

33. PREPARED BY

34. APPROVED BY

35. DATE OF APPROVAL

36. REVISIONS

37. DATE OF REVISION

38. PREPARED BY

39. APPROVED BY

40. DATE OF APPROVAL

41. REVISIONS

42. DATE OF REVISION

43. PREPARED BY

44. APPROVED BY

45. DATE OF APPROVAL

46. REVISIONS

47. DATE OF REVISION

48. PREPARED BY

49. APPROVED BY

50. DATE OF APPROVAL

51. REVISIONS

52. DATE OF REVISION

53. PREPARED BY

54. APPROVED BY

55. DATE OF APPROVAL

56. REVISIONS

57. DATE OF REVISION

58. PREPARED BY

59. APPROVED BY

60. DATE OF APPROVAL

61. REVISIONS

62. DATE OF REVISION

63. PREPARED BY

64. APPROVED BY

65. DATE OF APPROVAL

66. REVISIONS

67. DATE OF REVISION

68. PREPARED BY

69. APPROVED BY

70. DATE OF APPROVAL

71. REVISIONS

72. DATE OF REVISION

73. PREPARED BY

74. APPROVED BY

75. DATE OF APPROVAL

76. REVISIONS

77. DATE OF REVISION

78. PREPARED BY

79. APPROVED BY

80. DATE OF APPROVAL

81. REVISIONS

82. DATE OF REVISION

83. PREPARED BY

84. APPROVED BY

85. DATE OF APPROVAL

86. REVISIONS

87. DATE OF REVISION

88. PREPARED BY

89. APPROVED BY

90. DATE OF APPROVAL

91. REVISIONS

92. DATE OF REVISION

93. PREPARED BY

94. APPROVED BY

95. DATE OF APPROVAL

96. REVISIONS

97. DATE OF REVISION

98. PREPARED BY

99. APPROVED BY

100. DATE OF APPROVAL

101. REVISIONS

102. DATE OF REVISION

103. PREPARED BY

104. APPROVED BY

105. DATE OF APPROVAL

106. REVISIONS

107. DATE OF REVISION

108. PREPARED BY

109. APPROVED BY

110. DATE OF APPROVAL

111. REVISIONS

112. DATE OF REVISION

113. PREPARED BY

114. APPROVED BY

115. DATE OF APPROVAL

116. REVISIONS

117. DATE OF REVISION

118. PREPARED BY

119. APPROVED BY

120. DATE OF APPROVAL

121. REVISIONS

122. DATE OF REVISION

123. PREPARED BY

124. APPROVED BY

125. DATE OF APPROVAL

126. REVISIONS

127. DATE OF REVISION

128. PREPARED BY

129. APPROVED BY

130. DATE OF APPROVAL

131. REVISIONS

132. DATE OF REVISION

133. PREPARED BY

134. APPROVED BY

135. DATE OF APPROVAL

136. REVISIONS

137. DATE OF REVISION

138. PREPARED BY

139. APPROVED BY

140. DATE OF APPROVAL

141. REVISIONS

142. DATE OF REVISION

143. PREPARED BY

144. APPROVED BY

145. DATE OF APPROVAL

146. REVISIONS

147. DATE OF REVISION

148. PREPARED BY

149. APPROVED BY

150. DATE OF APPROVAL

151. REVISIONS

152. DATE OF REVISION

153. PREPARED BY

154. APPROVED BY

155. DATE OF APPROVAL

156. REVISIONS

157. DATE OF REVISION

158. PREPARED BY

159. APPROVED BY

160. DATE OF APPROVAL

161. REVISIONS

162. DATE OF REVISION

163. PREPARED BY

164. APPROVED BY

165. DATE OF APPROVAL

166. REVISIONS

167. DATE OF REVISION

168. PREPARED BY

169. APPROVED BY

170. DATE OF APPROVAL

171. REVISIONS

172. DATE OF REVISION

173. PREPARED BY

174. APPROVED BY

175. DATE OF APPROVAL

176. REVISIONS

177. DATE OF REVISION

178. PREPARED BY

179. APPROVED BY

180. DATE OF APPROVAL

181. REVISIONS

182. DATE OF REVISION

183. PREPARED BY

184. APPROVED BY

185. DATE OF APPROVAL

186. REVISIONS

187. DATE OF REVISION

188. PREPARED BY

189. APPROVED BY

190. DATE OF APPROVAL

191. REVISIONS

192. DATE OF REVISION

193. PREPARED BY

194. APPROVED BY

195. DATE OF APPROVAL

196. REVISIONS

197. DATE OF REVISION

198. PREPARED BY

199. APPROVED BY

200. DATE OF APPROVAL

201. REVISIONS

202. DATE OF REVISION

203. PREPARED BY

204. APPROVED BY

205. DATE OF APPROVAL

206. REVISIONS

207. DATE OF REVISION

208. PREPARED BY

209. APPROVED BY

210. DATE OF APPROVAL

211. REVISIONS

212. DATE OF REVISION

213. PREPARED BY

214. APPROVED BY

215. DATE OF APPROVAL

216. REVISIONS

217. DATE OF REVISION

218. PREPARED BY

219. APPROVED BY

220. DATE OF APPROVAL

221. REVISIONS

222. DATE OF REVISION

223. PREPARED BY

224. APPROVED BY

225. DATE OF APPROVAL

226. REVISIONS

227. DATE OF REVISION

228. PREPARED BY

229. APPROVED BY

230. DATE OF APPROVAL

231. REVISIONS

232. DATE OF REVISION

233. PREPARED BY

234. APPROVED BY

235. DATE OF APPROVAL

236. REVISIONS

237. DATE OF REVISION

238. PREPARED BY

239. APPROVED BY

240. DATE OF APPROVAL

241. REVISIONS

242. DATE OF REVISION

243. PREPARED BY

244. APPROVED BY

245. DATE OF APPROVAL

246. REVISIONS

247. DATE OF REVISION

248. PREPARED BY

249. APPROVED BY

250. DATE OF APPROVAL

251. REVISIONS

252. DATE OF REVISION

253. PREPARED BY

254. APPROVED BY

255. DATE OF APPROVAL

256. REVISIONS

257. DATE OF REVISION

258. PREPARED BY

259. APPROVED BY

260. DATE OF APPROVAL

261. REVISIONS

262. DATE OF REVISION

263. PREPARED BY

264. APPROVED BY

265. DATE OF APPROVAL

266. REVISIONS

267. DATE OF REVISION

268. PREPARED BY

269. APPROVED BY

270. DATE OF APPROVAL

271. REVISIONS

272. DATE OF REVISION

273. PREPARED BY

274. APPROVED BY

275. DATE OF APPROVAL

276. REVISIONS

277. DATE OF REVISION

278. PREPARED BY

279. APPROVED BY

280. DATE OF APPROVAL

281. REVISIONS

282. DATE OF REVISION

283. PREPARED BY

284. APPROVED BY

285. DATE OF APPROVAL

286. REVISIONS

287. DATE OF REVISION

288. PREPARED BY

289. APPROVED BY

290. DATE OF APPROVAL

291. REVISIONS

292. DATE OF REVISION

293. PREPARED BY

294. APPROVED BY

295. DATE OF APPROVAL

296. REVISIONS

297. DATE OF REVISION

298. PREPARED BY

299. APPROVED BY

300. DATE OF APPROVAL

301. REVISIONS

302. DATE OF REVISION

303. PREPARED BY

304. APPROVED BY

305. DATE OF APPROVAL

306. REVISIONS

307. DATE OF REVISION

308. PREPARED BY

309. APPROVED BY

310. DATE OF APPROVAL

311. REVISIONS

312. DATE OF REVISION

313. PREPARED BY

314. APPROVED BY

315. DATE OF APPROVAL

316. REVISIONS

317. DATE OF REVISION

318. PREPARED BY

319. APPROVED BY

320. DATE OF APPROVAL

321. REVISIONS

322. DATE OF REVISION

323. PREPARED BY

324. APPROVED BY

325. DATE OF APPROVAL

326. REVISIONS

327. DATE OF REVISION

328. PREPARED BY

329. APPROVED BY

330. DATE OF APPROVAL

331. REVISIONS

332. DATE OF REVISION

333. PREPARED BY

334. APPROVED BY

335. DATE OF APPROVAL

336. REVISIONS

337. DATE OF REVISION

338. PREPARED BY

339. APPROVED BY

340. DATE OF APPROVAL

341. REVISIONS

342. DATE OF REVISION

343. PREPARED BY

344. APPROVED BY

345. DATE OF APPROVAL

346. REVISIONS

347. DATE OF REVISION

348. PREPARED BY

349. APPROVED BY

350. DATE OF APPROVAL

351. REVISIONS

352. DATE OF REVISION

353. PREPARED BY

354. APPROVED BY

355. DATE OF APPROVAL

356. REVISIONS

357. DATE OF REVISION

358. PREPARED BY

359. APPROVED BY

360. DATE OF APPROVAL

361. REVISIONS

362. DATE OF REVISION

363. PREPARED BY

364. APPROVED BY

365. DATE OF APPROVAL

366. REVISIONS

367. DATE OF REVISION

368. PREPARED BY

369. APPROVED BY

370. DATE OF APPROVAL

371. REVISIONS

372. DATE OF REVISION

373. PREPARED BY

374. APPROVED BY

375. DATE OF APPROVAL

376. REVISIONS

377. DATE OF REVISION

378. PREPARED BY

379. APPROVED BY

380. DATE OF APPROVAL

381. REVISIONS

382. DATE OF REVISION

383. PREPARED BY

384. APPROVED BY

385. DATE OF APPROVAL

386. REVISIONS

387. DATE OF REVISION

388. PREPARED BY

389. APPROVED BY

390. DATE OF APPROVAL

391. REVISIONS

392. DATE OF REVISION

393. PREPARED BY

394. APPROVED BY

395. DATE OF APPROVAL

396. REVISIONS

397. DATE OF REVISION

398. PREPARED BY

399. APPROVED BY

400. DATE OF APPROVAL

401. REVISIONS

402. DATE OF REVISION

403. PREPARED BY

404. APPROVED BY

405. DATE OF APPROVAL

406. REVISIONS

407. DATE OF REVISION

408. PREPARED BY

409. APPROVED BY

410. DATE OF APPROVAL

411. REVISIONS

412. DATE OF REVISION

413. PREPARED BY

414. APPROVED BY

415. DATE OF APPROVAL

416. REVISIONS

417. DATE OF REVISION

418. PREPARED BY

419. APPROVED BY

420. DATE OF APPROVAL

421. REVISIONS

422. DATE OF REVISION

423. PREPARED BY

424. APPROVED BY

425. DATE OF APPROVAL

426. REVISIONS

427. DATE OF REVISION

428. PREPARED BY

429. APPROVED BY

430. DATE OF APPROVAL

431. REVISIONS

432. DATE OF REVISION

433. PREPARED BY

434. APPROVED BY

435. DATE OF APPROVAL

436. REVISIONS

437. DATE OF REVISION

438. PREPARED BY

439. APPROVED BY

440. DATE OF APPROVAL

441. REVISIONS

442. DATE OF REVISION

443. PREPARED BY

444. APPROVED BY

445. DATE OF APPROVAL

446. REVISIONS

447. DATE OF REVISION

448. PREPARED BY

449. APPROVED BY

450. DATE OF APPROVAL

451. REVISIONS

452. DATE OF REVISION

453. PREPARED BY

454. APPROVED BY

455. DATE OF APPROVAL

456. REVISIONS

457. DATE OF REVISION

458. PREPARED BY

459. APPROVED BY

460. DATE OF APPROVAL

461. REVISIONS

462. DATE OF REVISION

463. PREPARED BY

464. APPROVED BY

465. DATE OF APPROVAL

466. REVISIONS

467. DATE OF REVISION

468. PREPARED BY

469. APPROVED BY

470. DATE OF APPROVAL

471. REVISIONS

472. DATE OF REVISION

473. PREPARED BY

474. APPROVED BY

475. DATE OF APPROVAL

476. REVISIONS

477. DATE OF REVISION

478. PREPARED BY

479. APPROVED BY

480. DATE OF APPROVAL

481. REVISIONS

482. DATE OF REVISION

483. PREPARED BY

484. APPROVED BY

485. DATE OF APPROVAL

486. REVISIONS

487. DATE OF REVISION

488. PREPARED BY

489. APPROVED BY

490. DATE OF APPROVAL

491. REVISIONS

492. DATE OF REVISION

493. PREPARED BY

494. APPROVED BY

495. DATE OF APPROVAL

496. REVISIONS

497. DATE OF REVISION

498. PREPARED BY

499. APPROVED BY

500. DATE OF APPROVAL

501. REVISIONS

502. DATE OF REVISION

503. PREPARED BY

504. APPROVED BY

505. DATE OF APPROVAL

506. REVISIONS

507. DATE OF REVISION

508. PREPARED BY

509. APPROVED BY

510. DATE OF APPROVAL

511. REVISIONS

512. DATE OF REVISION

513. PREPARED BY

514. APPROVED BY

515. DATE OF APPROVAL

516. REVISIONS

517. DATE OF REVISION

518. PREPARED BY

519. APPROVED BY

520. DATE OF APPROVAL

521. REVISIONS

522. DATE OF REVISION

523. PREPARED BY

524. APPROVED BY

525. DATE OF APPROVAL

526. REVISIONS

527. DATE OF REVISION

528. PREPARED BY

529. APPROVED BY

530. DATE OF APPROVAL

531. REVISIONS

532. DATE OF REVISION

533. PREPARED BY

534. APPROVED BY

535. DATE OF APPROVAL

536. REVISIONS

537. DATE OF REVISION

538. PREPARED BY

539. APPROVED BY

540. DATE OF APPROVAL

541. REVISIONS

542. DATE OF REVISION

543. PREPARED BY

544. APPROVED BY

545. DATE OF APPROVAL

546. REVISIONS

547. DATE OF REVISION

548. PREPARED BY

549. APPROVED BY

550. DATE OF APPROVAL

551. REVISIONS

552. DATE OF REVISION

553. PREPARED BY

554. APPROVED BY

555. DATE OF APPROVAL

556. REVISIONS

557. DATE OF REVISION

558. PREPARED BY

559. APPROVED BY

560. DATE OF APPROVAL

561. REVISIONS

562. DATE OF REVISION

563. PREPARED BY

564. APPROVED BY

565. DATE OF APPROVAL

566. REVISIONS

567. DATE OF REVISION

568. PREPARED BY

569. APPROVED BY

570. DATE OF APPROVAL

571. REVISIONS

572. DATE OF REVISION

573. PREPARED BY

574. APPROVED BY

575. DATE OF APPROVAL

576. REVISIONS

577. DATE OF REVISION

578. PREPARED BY

579. APPROVED BY

580. DATE OF APPROVAL

581. REVISIONS

582. DATE OF REVISION

583. PREPARED BY

584. APPROVED BY

585. DATE OF APPROVAL

586. REVISIONS

587. DATE OF REVISION

588. PREPARED BY

589. APPROVED BY

590. DATE OF APPROVAL

591. REVISIONS

592. DATE OF REVISION

593. PREPARED BY

594. APPROVED BY

595. DATE OF APPROVAL

596. REVISIONS

597. DATE OF REVISION

598. PREPARED BY

599. APPROVED BY

600. DATE OF APPROVAL

601. REVISIONS

602. DATE OF REVISION

603. PREPARED BY

604. APPROVED BY

605. DATE OF APPROVAL

606. REVISIONS

607. DATE OF REVISION

608. PREPARED BY

609. APPROVED BY

610. DATE OF APPROVAL

611. REVISIONS

612. DATE OF REVISION

613. PREPARED BY

614. APPROVED BY

615. DATE OF APPROVAL

616. REVISIONS

617. DATE OF REVISION

618. PREPARED BY

619. APPROVED BY

620. DATE OF APPROVAL

621. REVISIONS

622. DATE OF REVISION

623. PREPARED BY

624. APPROVED BY

625. DATE OF APPROVAL

626. REVISIONS

627. DATE OF REVISION

628. PREPARED BY

629. APPROVED BY

630. DATE OF APPROVAL

631. REVISIONS

632. DATE OF REVISION

633. PREPARED BY

634. APPROVED BY

635. DATE OF APPROVAL

636. REVISIONS

637. DATE OF REVISION

638. PREPARED BY

639. APPROVED BY

640. DATE OF APPROVAL

641. REVISIONS

642. DATE OF REVISION

643. PREPARED BY

644. APPROVED BY

645. DATE OF APPROVAL

646. REVISIONS

647. DATE OF REVISION

648. PREPARED BY

649. APPROVED BY

650. DATE OF APPROVAL

651. REVISIONS

652. DATE OF REVISION

653. PREPARED BY

654. APPROVED BY

655. DATE OF APPROVAL

656. REVISIONS

657. DATE OF REVISION

658. PREPARED BY

659. APPROVED BY

660. DATE OF APPROVAL

661. REVISIONS

662. DATE OF REVISION

663. PREPARED BY

664. APPROVED BY

665. DATE OF APPROVAL

666. REVISIONS

667. DATE OF REVISION

668. PREPARED BY

669. APPROVED BY

670. DATE OF APPROVAL

671. REVISIONS

672. DATE OF REVISION

673. PREPARED BY

674. APPROVED BY

675. DATE OF APPROVAL

676. REVISIONS

677. DATE OF REVISION

678. PREPARED BY

679. APPROVED BY

680. DATE OF APPROVAL

681. REVISIONS

682. DATE OF REVISION

683. PREPARED BY

684. APPROVED BY

685. DATE OF APPROVAL

686. REVISIONS

687. DATE OF REVISION

688. PREPARED BY

689. APPROVED BY

690. DATE OF APPROVAL

691. REVISIONS

692. DATE OF REVISION

693. PREPARED BY

694. APPROVED BY

695. DATE OF APPROVAL

696. REVISIONS

697. DATE OF REVISION

698. PREPARED BY

699. APPROVED BY

700. DATE OF APPROVAL

701. REVISIONS

702. DATE OF REVISION

703. PREPARED BY

704. APPROVED BY

705. DATE OF APPROVAL

706. REVISIONS

707. DATE OF REVISION

708. PREPARED BY

709. APPROVED BY

710. DATE OF APPROVAL

711. REVISIONS

712. DATE OF REVISION

713. PREPARED BY

714. APPROVED BY

715. DATE OF APPROVAL

716. REVISIONS

717. DATE OF REVISION

718. PREPARED BY

719. APPROVED BY

720. DATE OF APPROVAL

721. REVISIONS

722. DATE OF REVISION

723. PREPARED BY

724. APPROVED BY

725. DATE OF APPROVAL

726. REVISIONS

727. DATE OF REVISION

728. PREPARED BY

729. APPROVED BY

730. DATE OF APPROVAL

731. REVISIONS

732. DATE OF REVISION

733. PREPARED BY

734. APPROVED BY

735. DATE OF APPROVAL

736. REVISIONS

737. DATE OF REVISION

738. PREPARED BY

739. APPROVED BY

740. DATE OF APPROVAL

741. REVISIONS

742. DATE OF REVISION

743. PREPARED BY

744. APPROVED BY

745. DATE OF APPROVAL

746. REVISIONS

747. DATE OF REVISION

748. PREPARED BY

749. APPROVED BY

750. DATE OF APPROVAL

751. REVISIONS

752. DATE OF REVISION

753. PREPARED BY

754. APPROVED BY

755. DATE OF APPROVAL

756. REVISIONS

757. DATE OF REVISION

758. PREPARED BY

759. APPROVED BY

760. DATE OF APPROVAL

761. REVISIONS

762. DATE OF REVISION

763. PREPARED BY

764. APPROVED BY

765. DATE OF APPROVAL

766. REVISIONS

767. DATE OF REVISION

768. PREPARED BY

769. APPROVED BY

770. DATE OF APPROVAL

771. REVISIONS

772. DATE OF REVISION

773. PREPARED BY

774. APPROVED BY

775. DATE OF APPROVAL

776. REVISIONS

777. DATE OF REVISION

778. PREPARED BY

779. APPROVED BY

780. DATE OF APPROVAL

781. REVISIONS

782. DATE OF REVISION

783. PREPARED BY

784. APPROVED BY

785. DATE OF APPROVAL

786. REVISIONS

787. DATE OF REVISION

788. PREPARED BY

789. APPROVED BY

790. DATE OF APPROVAL

791. REVISIONS

792. DATE OF REVISION

793. PREPARED BY

794. APPROVED BY

795. DATE OF APPROVAL

796. REVISIONS

797. DATE OF REVISION

798. PREPARED BY

799. APPROVED BY

800. DATE OF APPROVAL

801. REVISIONS

802. DATE OF REVISION

803. PREPARED BY

804. APPROVED BY

805. DATE OF APPROVAL

806. REVISIONS

807. DATE OF REVISION

808. PREPARED BY

809. APPROVED BY

810. DATE