UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 11-K

(Mark One):

Annual report pursuant to Section 15(d) of the Securities Exchange

For the fiscal year ended December 31, 2011

OR

.. Transition report pursuant to Section 15(d) of the Securities Exchange Act of 1934

For the transition period from to

Commission file number 1-4119

Ambassador Steel Corporation 401(k) Profit Sharing Plan

Nucor Corporation 1915 Rexford Road Charlotte, NC 28211

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Ambassador Steel Corporation	401(k)	Profit	Sharing	Plan
December 31, 2011 and 2010			_	

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Report of Independent Registered Public Accounting Firm

Plan Administrator, Retirement Committee and Plan Participants Ambassador Steel Corporation 401(k) Profit Sharing Plan Auburn, Indiana

We have audited the accompanying statements of net assets available for benefits of Ambassador Steel Corporation 401(k) Profit Sharing Plan (Plan) as of December 31, 2011 and 2010, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audit included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of Ambassador Steel Corporation 401(k) Profit Sharing Plan as of December 31, 2011 and 2010, and the changes in its net assets available for benefits for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplementary information as listed in the table of contents is not a required part of the basic financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental information is the responsibility of the Plan's management. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

/S/ BKD, LLP

BKD, LLP

Fort Wayne, Indiana June 26, 2012

Ambassador Steel Corporation 401(k) Profit Sharing Plan Statements of Net Assets Available for Benefits December 31, 2011 and 2010

	2011	2010
Assets		
Investments, at fair value	\$26,357,201	\$26,742,290
Notes receivable from participants	1,270,359	1,016,930
Total assets	27,627,560	27,759,220
Liabilities		
Return of excess contributions	4,140	20,304
Net Assets Available for Benefits	\$27,623,420	\$27,738,916

See Notes to Financial Statements

Ambassador Steel Corporation 401(k) Profit Sharing Plan Statements of Changes in Net Assets Available for Benefits Years Ended December 31, 2011 and 2010

	2011	2010
Additions		
Investment income (loss)		
Net appreciation (depreciation) in fair value of investments	\$(2,086,841)	\$2,178,598
Interest	147,872	161,940
Dividends and distributions	1,375,784	496,457
Net investment income (loss)	(563,185)	2,836,995
Contributions		
Employer	925,673	888,095
Participants	1,611,631	1,458,414
Rollovers	213,540	125,593
Merger into Plan	_	389,586
Total contributions	2,750,844	2,861,688
Total additions	2,187,659	5,698,683

Deductions

Benefits paid to participants	2,297,524	2,092,710
Administrative expenses	5,631	5,331
Total deductions	2,303,155	2,098,041
Net Increase (Decrease)	(115,496)	3,600,642
Net Assets Available for Benefits, Beginning of Year	27,738,916	24,138,274
Net Assets Available for Benefits, End of Year	\$27,623,420	\$27,738,916

See Notes to Financial Statements

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

Note 1: Description of the Plan

The following description of the Ambassador Steel Corporation 401(k) Profit Sharing Plan (Plan) provides only general information. Participants should refer to the Summary Plan Description for a more complete description of the Plan's provisions which is available from the Plan Administrator.

General

The Plan is a defined-contribution plan which provides retirement benefits for all employees of Ambassador Steel Corporation (Company) who have at least one month of service and are age 18 or older. Those whose employment is subject to a collective bargaining agreement are not eligible. The Company is a subsidiary of Nucor Corporation (Nucor). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). Great-West Life & Annuity Company (Great-West) serves as Plan recordkeeper and Reliance Trust Company (Reliance) serves as the trustee. Orchard Trust Company, LLC serves as the custodian.

Contributions

The Plan permits eligible employees through a salary deferral election to have the Company make annual contributions of up to 100% of eligible compensation. The Plan also includes an automatic deferral feature whereby a participant is treated as electing to defer 3% of eligible compensation unless the participant made an affirmative election otherwise. The Plan also permits Roth contributions and catch up contributions for participants age 50 and over. Employee rollover contributions are also permitted. The Company may make discretionary matching contributions, subject to a maximum matching contribution of \$5,000 per participant. Company profit-sharing contributions are discretionary as determined by the Company's Board of Directors. No profit sharing contributions were made in 2011 or 2010. Contributions are subject to certain limitations.

Participant Investment Account Options

Investment account options available include various funds. Each participant has the option of directing his contributions into any of the separate investment accounts and may change the allocation daily.

Participant Accounts

Each participant's account is credited with the participant's contribution, the Company's contribution and the Plan's earnings. It is also charged with an allocation of administrative expenses. Allocations are based on participant earnings or account balances, as defined. The benefits to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Notes Receivable from Participants

Participants may borrow approved amounts from their fund accounts at no less than \$1,000 and no greater than (a) 50% of his or her account balance, or (b) \$50,000 reduced by the excess, if any, of a participant's highest outstanding balance of loans during the 12-month period ending on the day before the new loan is made over a participant's current balance of loans from the Plan and other

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Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

qualified Plans on the day the new loan is made. The term of repayment of a loan other than a home loan must not be greater than five years. The term of repayment of a home loan must not be greater than ten years. A loan is secured by the balance in the participant's vested account and bears interest at a rate commensurate with local prevailing rates as determined by the Plan Administrator at the time of the loan. Principal and interest is paid ratably through payroll deductions. The maximum number of loans that a participant may have at any one time is two. Should the participant terminate as an employee of the Company, the balance of the outstanding loan (including any accrued interest) becomes due and the participant's vested account may be used to pay the balance of the outstanding loans, which is considered a distribution and would be taxable in the year the loan goes into default.

Vesting

Participants are immediately vested in their voluntary contributions plus earnings thereon. Vesting in the Company's contribution portion of their accounts plus earnings thereon is based on years of service. A participant is fully vested after six years of service, each year consisting of at least 1,000 hours of service. The nonvested balance is forfeited upon termination of service.

Payment of Benefits

Upon termination of service, if the amount of benefit is \$1,000 or less it will be paid out in a single lump sum. If the amount is greater than \$1,000, the participant may elect a lump sum payment or receive installment payments under the terms of the Plan.

Forfeited Accounts

At December 31, 2011 and 2010, forfeited nonvested accounts totaled \$8,952 and \$123,848, respectively. These accounts will be used to reduce future Company contributions or pay administrative expenses. Also, in 2011 and 2010, Company contributions were reduced by \$206,421 and \$163,074 from forfeited nonvested accounts.

Plan Termination

The Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan, subject to the provisions of ERISA. In the event of Plan termination, participants will become 100% vested in their accounts.

Note 2: Summary of Significant Accounting Policies Basis of Accounting

The accompanying financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Valuation of Investments and Income Recognition

Quoted market prices, if available, are used to value investments. Mutual funds are valued at the net asset value (NAV) of shares held by the Plan at year-end. Nucor common stock is valued based on the closing price reported on the active market at year-end. The fair value of insurance company investment contracts is calculated by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the creditworthiness of the issuer. Cost approximates fair value.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation (depreciation) includes the Plan's gains and losses on investments bought and sold as well as held during the year.

Risks and Uncertainties

The Plan provides for various investment options that are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the Statements of Net Assets Available for Benefits and the Statements of Changes in Net Assets Available for Benefits.

Plan Tax Status

The Plan operates under a nonstandardized adoption agreement in connection with a prototype retirement plan and trust/custodial document sponsored by Orchard Trust Company, LLC. This prototype plan document has been filed with the appropriate agency. The Plan has not obtained or requested a determination letter. However, the Plan Administrator believes that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal

Revenue Code and that the Plan was qualified and the related trust was tax exempt as of the financial statement date.

With a few exceptions, the Plan is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2008.

Notes Receivable From Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant loans are reclassified as distributions based upon the

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

terms of the plan document. Interest income recognized on notes receivable from participants totaled \$44,706 and \$44,362 for 2011 and 2010, respectively. These amounts are included in interest on the Statements of Changes in Net Assets Available for Benefits.

Payment of Benefits

Benefit payments to participants are recorded upon distribution.

Administrative Expenses

Administrative expenses may be paid by the Company or the Plan, at the Company's discretion.

Transfers Between Fair Value Hierarchy Levels

Transfers in and out of Level 1 (quoted market prices), Level 2 (other significant observable inputs) and Level 3 (significant unobservable inputs), if any, are recognized on the period ending date.

Note 3: Investments

Except for its investment contract with an insurance company (Note 8), the Plan's investments are held by a bank-administered trust fund.

	2011	2010
Mutual funds		
Balanced funds	\$10,752,585	\$11,004,124
Growth funds	3,487,038	4,039,627
Fixed income funds	1,716,529	1,556,933
International funds	2,169,274	2,833,290
Value funds	1,865,438	2,042,344

	<u>\$26,357,201</u>	\$ <u>26,742,290</u>
Insurance company investment contracts	6,035,886	5,046,336
Nucor Corporation common stock	330,451	219,636

The Plan's investments (including investments bought, sold and held during the year) appreciated (depreciated) in fair value as follows:

	2011	2010
Mutual funds	\$(2,067,440)	\$2,186,597
Nucor Corporation common stock	(19,401)	(7,999)
	\$(2,086,841)	\$2,178,598

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

The fair value of individual investments that represent 5% or more of the Plan's net assets available for benefits are as follows:

	December 31	
	2011	2010
Growth Fund of America	\$1,629,512	\$2,088,731
Davis New York Venture Fund	1,508,391	1,901,041
Loomis Sales Bond Fund	1,716,529	1,556,933
Maxim Moderately Aggressive Profile II	2,897,524	2,747,479
Maxim Moderate Profile II	2,044,349	2,125,496
Maxim Aggressive Profile II	1,763,715	1,903,696
Oppenheimer Global Fund	1,273,719	1,527,231
Key Guaranteed Portfolio	6,025,956	5,037,139

^{*}Does not represent 5% of Plan net assets available for benefits at December 31, 2011, but does at December 31, 2010.

Note 4: Related Party Transactions

The Key Guaranteed Portfolio (Portfolio) is issued by Great-West, who is recordkeeper of the Plan. Transactions in the Portfolio are considered to be party-in-interest investments. Fees paid to Great-West and affiliates for administrative and recordkeeping services were \$5,631 and \$5,331 for the years ended December 31, 2011 and 2010, respectively. Additionally, the Plan offers common stock of Nucor Corporation as an investment option. Since Nucor Corporation is the owner of the sponsor of the Plan, these investments are considered to be party-in-interest investments.

The Company provides certain accounting, recordkeeping and administrative services for which it receives no compensation.

Note 5: Plan Amendments

During 2010, the Plan was restated to adopt the Heroes Earnings Assistance and Relief Act of 2008 (HEART) and Worker, Retiree, and Employer Act of 2008 (WRERA), with an effective date of January 1, 2010.

Effective January 1, 2011, the Plan was amended to reflect changes in the definition of eligible compensation.

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

Note 6: Plan Merger

During 2010, the Plan merged in net assets of Nufab National Rebar, Inc. totaling \$389,586.

Note 7: Disclosures About Fair Value of Assets and Liabilities

Topic 820, Fair Value Measurements, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Topic 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

- **Level 1** Quoted prices in active markets for identical assets or liabilities Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets
- **Level 2** that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities

Following is a description of the valuation methodologies used for assets measured at fair value on a recurring basis and recognized in the accompanying Statements of Net Assets Available for Benefits, as well as the general classification of such assets pursuant to the valuation hierarchy. The Plan has no liabilities measured at fair value on a recurring basis. Additionally, the Plan has no assets or liabilities measured at fair value on a nonrecurring basis.

Investments

Where quoted market prices are available in an active market, investments are classified within Level 1 of the valuation hierarchy. Level 1 investments consist of interests in mutual funds and common stock of Nucor Corporation. If quoted market prices are not available, then fair values are classified as Level 2 and estimated by using pricing models, quoted prices of securities with similar characteristics or discounted cash flows. The Plan has no investments classified as Level 2. In certain cases where Level 1 or Level 2 inputs are not available, investments are classified within Level 3 of the hierarchy and consists of

insurance company investment contracts. Insurance company investment contracts are calculated by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the creditworthiness of the issuer.

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

The following table presents the fair value measurements of assets recognized in the accompanying Statements of Net Assets Available for Benefits measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements fall at December 31, 2011 and 2010:

	Fair Value Measurements Using			
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Mutual funds				
Balanced funds	\$10,752,585	\$10,752,585	\$ —	\$ —
Growth funds	3,487,038	3,487,038	_	_
Fixed income funds	1,716,529	1,716,529	_	_
International funds	2,169,274	2,169,274	_	_
Value funds	1,865,438	1,865,438	_	_
Common stock, steel industry	330,451	330,451	_	_

Insurance company investment contracts	6,035,886	_	_	6,035,886
	\$26,357,201	\$20,321,315		\$ 6,035,886
	2010			
	Fair Value	Fair Value Mo Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Mutual funds				
Balanced funds	\$11,004,124	\$11,004,124	\$ —	\$ —
Growth funds	4,039,627	4,039,627	_	_
Fixed income funds	1,556,933	1,556,933	_	_
International funds	2,833,290	2,833,290	_	_
Value funds	2,042,344	2,042,344	_	_
Common stock, steel industry	219,636	219,636	_	_
Insurance company investment contracts	5,046,336	_	_	5,046,336
	\$26,742,290	\$21,695,954	<u>\$</u>	\$ 5,046,336

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

The following sets forth a summary of changes in the fair value of the Plan's Level 3 assets for the years ended December 31, 2011 and 2010:

	Insurance Company Investment Contracts
Balances, January 1, 2010	\$ 4,914,159
Purchases	855,677
Settlements	(723,500)
Balances, December 31, 2010	5,046,336
Purchases	1,829,467
Settlements	(839,917)
Balances, December 31, 2011	\$ 6,035,886

Note 8: Investment Contract with Insurance Company

The Plan maintains a fully benefit-responsive investment contract with Great-West. Great-West maintains the contributions in a general account. The account is credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The guaranteed investment contract issuer is contractually obligated to repay the principal and a specified interest rate guaranteed to the Plan.

As described in the basis of accounting disclosure, because the guaranteed investment contract is fully benefit responsive, contract value is the relevant measurement attribute for that portion of the net assets available for benefits attributable to the guaranteed investment contract. Contract value, as reported to the Plan by Great-West, represents contributions made under the contract, plus earnings, less participant

withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

There are no reserves against the contract value for credit risk of the contract issuer or otherwise. The fair value of the investment contract approximates contract value. The crediting interest rate is based on a formula agreed upon with the issuer, but it may not be less than zero percent. Such interest rates are reviewed on a quarterly basis for resetting.

Certain events limit the ability of the Plan to transact at contract value with the issuer. Such events include the following: (1) amendments to the Plan documents (including complete or partial Plan termination or merger with another plan), (2) changes to Plan's prohibition on competing investment options or deletion of equity wash provisions, (3) bankruptcy of the Plan Sponsor or other Plan Sponsor events (for example, divestitures or spin-offs of a subsidiary) that cause a significant withdrawal from the Plan or (4) the failure of the trust to qualify for exemption from federal income taxes or any required prohibited transaction exemption under ERISA. The Plan Administrator does not believe the occurrence of any such value event, which would limit the Plan's ability to transact at contract value with participants, is probable.

Ambassador Steel Corporation 401(k) Profit Sharing Plan Notes to Financial Statements December 31, 2011 and 2010

The insurance company investment contract does not permit the insurance company to terminate the agreement prior to the scheduled maturity date.

	2011	2010
Average yields		
Based on actual earnings	2.03 %	2.49 %
Based on interest rate credited to participants	2.03 %	2.48 %

Note 9: Reconciliation of Financial Statements to Form 5500

Differences between the Annual Return/Report of Employee Benefit Plan (Form 5500) filed with the Internal Revenue Service and the accompanying financial statements include reporting on the modified cash basis on Form 5500 and on the accrual basis in the accompanying Statements of Net Assets Available for Benefits and classification differences. The reconciliation of net assets available for benefits between the financial statements and Form 5500 for 2011 and 2010, respectively, include recording the liability for excess contributions of \$4,140 and \$20,304 on the financial statements. The impact on the Statements of Changes in Net Assets Available for Benefits was to reduce contributions by \$16,164 and \$60,261 for 2011 and 2010, respectively, on the financial statements.

Note 10: Subsequent Events

Subsequent events have been evaluated through the date of the Report of Independent Registered Public Accounting Firm, which is the date the financial statements were issued.

Plan Amendments

Effective January 1, 2012, the Plan was amended and restated to reflect various changes including removing the automatic deferral feature, requiring sixty days of service for eligibility and changing to a five year vesting schedule for the Company's contributions.

Merger of Plan

During 2012, the Company decided to merge the Plan into a qualified plan sponsored by its parent company. Effective June 1, 2012, the Plan was merged into the Harris Steel, Inc. Profit Sharing and 401(k) Retirement Plan.

Supplementary Information

Ambassador Steel Corporation 401(k) Profit Sharing Plan EIN 35-1312982 PN 001 Schedule H, Line 4i—Schedule of Assets (Held at End of Year) December 31, 2011

Identity of Issuer	Description of Investment	Current Value
Mutual Funds		
American Balanced Fund	43,153 shares	\$786,246
Europacific Growth Fund	25,552 shares	895,555
Growth Fund of America	56,817 shares	1,629,512
Calvert Social Investment Fund	6,291 shares	209,682
Davis New York Venture Fund	46,412 shares	1,508,391
JP Morgan Mid Cap Value Fund	34,719 shares	812,762
Loomis Sales Bond Fund	124,027 shares	1,716,529
Lord Abbett Small Cap Value Fund	35,113 shares	1,052,676

	Maxim Aggressive Profile II	409,834 shares	1,763,715
	Maxim Conservative Profile II	84,682 shares	694,395
	Maxim Moderate Profile II	274,722 shares	2,044,349
	Maxim Moderately Aggressive Profile II	131,099 shares	2,897,524
	Maxim Moderately Conservative Profile II	295,000 shares	1,057,966
	Morgan Stanley Inst. Mid Cap Growth Fund	18,030 shares	572,800
	Oppenheimer Global Fund	23,570 shares	1,273,719
	Pioneer Oak Ridge Small Cap Growth Fund	38,712 shares	1,075,043
			19,990,864
	Common Stock		
*	Nucor Corporation	8,351 shares	330,451
	Insurance Company Investment Contracts		
*	Key Guaranteed Portfolio		6,025,956
			9,930

MetLife Insurance Contract

	_6,035,886
Various loans with interest rates varying from 3.25% to 9.25% due at various dates through 2020.	1,270,359
	\$27,627,560

Participant Loans

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^{*}Party-in-Interest

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

AMBASSADOR STEEL CORPORATION 401(K) PROFIT SHARING PLAN

Date: June 26, 2012 By: /s/ David E. Worthington

David E. Worthington Secretary and Treasurer

Ambassador Steel Corporation, Plan Administrator

EXHIBIT INDEX

$\begin{array}{c} \textbf{Description} \\ \textbf{Exhibit} \\ \textbf{No.} \\ \textbf{Document} \end{array}$

23 Consent of Independent Registered Public Accounting Firm

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